WORCESTER STATE UNIVERSITY

Change the way
the world works.

UNDERGRADUATE STUDIES CATALOG
2017-2018

NOTICE

The rules, regulations, policies, fees and other charges, courses of study, and academic requirements that appear in this catalog were in effect at the time of its publication. Like everything else in this catalog, they are published for informational purposes only, and they do not constitute a contract between Worcester State University and any student, applicant for admission or other person.

Whether noted elsewhere in this catalog or not, Worcester State University reserves the right to change, eliminate, and add to any existing (and to introduce additional) rules, regulations, policies, fees and other charges, courses of study and academic requirements. Whenever it does so, Worcester State University will give as much advance notice as it considers feasible or appropriate, but it reserves the right in all cases to do so without notice.

TABLE OF CONTENTS

Undergraduate Catalog 8

General Information 8

Accreditation 8

Campus 9

Change of Catalog Information 11

Community Relations 11

Family Educational Rights and Privacy Act 12

Mission 13

Policy on Nondiscrimination 13

TITLE IX/Policies and Inquiries 14

Undergraduate Studies 16

Admissions 18

Admission Following Withdrawal from Worcester State or Leave of Absence 18

Admission to Non-Degree Programs 19

Advanced Placement (AP) Guidelines 19

Alternatives for Individual Development (A.I.D.) 20

American Council on Education (ACE) College Credit Recommendation Service (CREDIT) 20

Application Process 20

College Level Examination Program (CLEP) 22

Commonwealth Commitment 23

Delayed (deferred) Enrollment 24

DHE Massachusetts High School Unit Requirements (Academic Courses) 24

Documentation of High School Diploma or Equivalency 25

Evening Undergraduate Course Offerings 25

Exceptions 25

First-Year Student Admission 26

GED/HiSET Recipients 26

International Applicants 26

International Baccalaureate (IB) Credit 27

MassTransfer 28

Non-Traditional Applicants 29

Post-Baccalaureate Pre-medical and Health Professions Program 29

Additional Admission Criteria for Selective Majors 30

Public Health - Pre-Nursing Program 31

Pre-entrance Immunization Requirements 31

Second Baccalaureate Degree 31

Special Admission 31

Special Non-Matriculated Students 31

Student Right-to-Know Act 31

The $30K Commitment 31

Transfer Student Admission 32

Transferring Credit from Other Institutions 32

Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy) 33

Academic Policies and Procedures 35

Academic Achievement Awards Ceremony 35

Academic Advising 35

Academic Honesty 35

Academic Reprieve Policy 42

Academic Support Services 42

Certificate 43

Concentration 43

Dean's List 43

Electives 43

General Requirements for the Baccalaureate Degree 43

Good Student Policy 44

Graduation Honors 44
Honors Program 44
Intent to Graduate 44
International Programs 44
Laptop and Technology Requirement 46
Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery 47
Capstone Experience 48
Constitutions 49
Creative Arts 50
Diversity Across the Curriculum 51
First-Year Seminar 53
Global Perspectives 54
Human Behavior and Social Processes 56
Individual and Community Well-being 58
Natural Systems and Processes (LAB) 59
Natural Systems and Processes (NSP) 59
Quantitative Literacy Across the Curriculum 60
Quantitative Reasoning 61
The United States and Its Role in the World 61
Thought, Language, and Culture 63
Writing 66
Writing Across the Curriculum 66
Matriculation 69
Multicultural Affairs 69
Program 69
Registration and Course Information 70
Standards of Progress 72
Transcripts 74
Undergraduate Grade Appeal Procedure 74
Withdrawal from Worcester State University/Leave of Absence 75
Enhanced Learning Opportunities 76
Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science 76
American Antiquarian Society Seminar 77
American Chemical Society 77
College Academic Program Sharing (CAPS) 77
Department Challenge 77
Higher Education Consortium of Central Massachusetts (HECCMA) 77
Internships and Professional Experiences 78
New England Regional Student Program 78
Off-Campus Courses 78
Pre-Law Program 78
Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program 78
Reserve Officer Training Corps (ROTC) 79
Summer Programs 81
The Washington Center for Internships and Academic Seminars 81
Services for Students 82
Athletics and Recreation 82
Bookstore 82
Campus Ministry 83
Career Services 83
Counseling Services 83
Dining Services 84
Health Forms and Immunization 84
Health Services 85
Office of Student Involvement and Leadership Development 86

Residence Life and Housing 87
Student Accessibility Services 87
The Binienda Center for Civic Engagement 87
University Police Department 87
Veterans Service 88
Financial Information 89
Affordability/Accessibility Disclosure Statement 89
Evening Undergraduate, Graduate, and Summer Programs 89
General Worcester State Refund Policy 90
Return of Title IV Funds 90
Room and Board 91
Student Health Insurance 91
Tuition and Fees 92
Tuition Surcharge 93
Undergraduate State-supported Programs 93
Financial Aid 95
Academic Scholarships for Returning Students 95
Application Process 95
Federal Grants and Benefits 95
Financial Aid Application Deadlines 96
Grants and Waivers for Massachusetts Residents 96
Merit Scholarships for Entering Students 97
Sources of Financial Aid 97
Student and Parent Loans 98
Student Employment 98
Tuition Payment Plan 99
Academic Calendar 100
Office of Academic Affairs 103
Ethnic Studies 103
Global Studies 104
Information Technology 112
Liberal Studies 113
Women's Studies 114
School of Education, Health, and Natural Sciences 123
Biology 124
Biology 130
Honors Program in Biology 132
Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science 133
Major in Biology, Concentration in Bioinformatics 134
Major in Biology, Concentration in Nuclear Medicine Technology 135
Minor in Biology 136
Psychobiology Minor 136
Biotechnology 137
Biotechnology 138
Combined BS/MS Program in Biotechnology 140
Honors Program in Biotechnology 142
Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University 142
Major in Biotechnology, Concentration in Bioinformatics 143
Major in Biotechnology, Concentration in Nuclear Medicine Technology 144
Chemistry 145
Chemistry 148
Chemistry Honors Program 150

Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program 151
Major in Chemistry, Concentration in Biochemistry 151
Major in Chemistry, Concentration in Bioinformatics 152
Major in Chemistry, Concentration in Green Chemistry and Environmental Chemistry 153
Major in Chemistry, Concentration in Materials Science and Inorganic Chemistry 153
Major in Chemistry, Concentration in Nuclear Medicine Technology 154
Minor in Chemistry 154
Communication Sciences and Disorders 155
Communication Sciences and Disorders 157
Communication Sciences and Disorders (CSD) Honors Program 159
Communication Sciences and Disorders Minor 160
Computer Science 161
Computer Science Major, Concentration in Big Data Analytics 164
Computer Science Major, Concentration in Software Development 166
Major in Computer Science 168
Major in Computer Science, Concentration in Bioinformatics 169
Minor in Computer Science 170
Education 171
Early Childhood Education Major ... 176
Early Education and Care Program 180
Elementary Education Major 182
Middle School Education 185
Secondary School Education 187
Environmental Science 190
Environmental Science 191
Geography and Earth Sciences 193
Geography Honors Program 197
Geography Major: Earth Science Education Concentration 197
Geography Major: Earth System Science Concentration 199
Geography Major: Environmental Studies Concentration 200
Geography Major: General Geography Concentration 202
Geography Major: Geographic Information Systems Concentration 203
Geography Minor 205
Health Sciences 206
Health Concentration 209
Health Education Major 209
Health Education Minor 211
Health Fitness Minor 211
Public Health - Pre-Nursing Program 211
Public Health Major 213
Public Health Minor 216
Mathematics 217
Financial Mathematics Minor 220
Mathematics for Elementary Education Major 220
Mathematics Major: Concentration in Secondary Education 222
Mathematics Major: Concentration in Statistics and Modeling 223
Mathematics Major: Concentration in Traditional Mathematics 225
Mathematics Minor 226
Middle School Mathematics Minor 226

Natural Science 228

Nursing 229

Fast-Track Program (RN-to-MS) 236

Track One (RN Undergraduate) 236

Track Two (RN-to-BS Program) 238

Track Three (LPN-to-BS Program) 240

Occupational Studies 242

Bachelor of Science Occupational Studies Program 245

Physical Education 247

Health Fitness Minor 247

Sport Coaching Minor 248

Physics 249

Physics Minor 251

School of Humanities and Social Sciences 252

Art 253

Art Minor 253

Visual and Performing Arts 253

Visual and Performing Arts Major 263

Visual and Performing Arts and Education, Double Major 264

Art Minor 253

Music Minor 266

Composition and Music Technology Minor 267

Theatre Minor 267

Business Administration 268

4Plus1 Program 273

Business Administration Major 273

Business Administration Major, Concentration in Accounting 275

Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management 276

Business Administration Major, Concentration in Finance 276

Business Administration Major, Concentration in International Business 277

Business Administration Major, Concentration in Management 277

Business Administration Major, Concentration in Marketing 278

Business Administration Minor 279

Communication 280

Communication Education Minor 285

Communication Major 285

Communication Major, Concentration in Advertising and Public Relations 286

Communication Major, Concentration in Media Production 287

Communication Minor 290

COPACE BS/MSPC Degree Program 290

Criminal Justice 291

Criminal Justice Major 296

Criminal Justice Minor 298

Economics 299

Economics Major 302

Economics Minor 305

English 306

English Major 314

English Major, Concentration in Journalism 315

English Major, Concentration in Writing 316

English Minor 317

Writing Minor 317

History 318

History Major 326

History Major, Concentration in Foreign Service 327
History Major, Concentration in Public History 328
History Minor 329
Middle East Studies Minor 329
Music 330
Music Minor 266
Composition and Music Technology Minor 267
Visual and Performing Arts 253
Visual and Performing Arts Major 263
Visual and Performing Arts and Education, Double Major 264
Art Minor 253
Music Minor 266
Composition and Music Technology Minor 267
Theatre Minor 267
Philosophy 346
Philosophy and Law Minor 349
Philosophy Minor 349
Political Science 350
Political Science Minor 354
Pre-Law Minor 354
Psychology 355
Psychobiology Minor 360
Psychology Major 361
Psychology Major, Concentration in Developmental Processes 363
Psychology Major, Concentration in Mental Health Services 363
Psychology Major, Interdisciplinary Concentration in Women's Studies 364
Psychology Minor 365
Sociology 366
Four Plus One Bachelor of Science in Sociology/Masters in Non-Profit Management 369
Sociology Major 370
Sociology Minor 371
Theatre 372
Theatre Minor 267
Visual and Performing Arts 253
Visual and Performing Arts Major 263
Visual and Performing Arts and Education, Double Major 264
Art Minor 253
Music Minor 266
Composition and Music Technology Minor 267
Theatre Minor 267
Urban Studies 388
Four Plus One Bachelor of Science in Urban Studies / Master of Science in Non-Profit Management 391
Intergenerational Studies and Community Service Minor 392
Urban Studies Major 392
Urban Studies Major, Concentration in Gerontology 393
Urban Studies Major, Concentration in Intergenerational and Community Service 393
Urban Studies Major, Concentration in Public Administration and Planning 394
Urban Studies Major, Concentration in Social Work and Social Policy 394
Urban Studies Minor 395
Visual and Performing Arts 253
Visual and Performing Arts Major 263
Visual and Performing Arts and Education, Double Major 264

Art Minor 253
Music Minor 266
Composition and Music Technology Minor 267
Theatre Minor 267
World Languages 411
Arabic 412
French 412
French Minor 414
Spanish 414
Spanish Major 418
Spanish Major, Concentration in Spanish for the Professions 419
Spanish Major, Concentration in Spanish/Education 421
Spanish Minor for Health Professionals 422
Professors Emeriti 424
Officials of Worcester State University 427
Alumni Association and Foundation Board 427
Administrative Offices 428
Directions to Campus 436
Discipline Information 437
Index 439

UNDERGRADUATE CATALOG

Worcester State University
486 Chandler Street
Worcester, MA 01602-2597
508-929-8000
http://www.worcester.edu

The listing of a course in this catalog is not a guarantee that the course will be offered in any particular semester. Course offerings are subject to change in response to student enrollment, faculty availability, changes in program requirements and other circumstances. The rules, regulations, policies, fees and other charges, courses of study, and academic requirements that appear in this catalog were in effect at the time of its publication. Like everything else in the catalog, they are published for informational purposes and do not constitute a contract between Worcester State University and any student, applicant for admission, or other person. Whether noted elsewhere in this catalog or not, Worcester State University reserves the right to change, eliminate, and add to any existing (and to introduce additional) rules, regulations, policies, fees or other charges, courses of study, and academic requirements. Whenever it does so, Worcester State University will give as much notice as it considers feasible or appropriate, but it reserves the right in all cases to do so without notice.

Graduate information is available in the Graduate School Catalog which can be found here.

General Information

From its founding in 1874, Worcester State University has been dedicated to educational programs that lead to self-enrichment and to careers in the professions, government, business, and industry.

As a public, state-supported university governed by a local Board of Trustees under the direction of the Massachusetts Department of Higher Education, Worcester State University is empowered to award baccalaureate and master's degrees in education and in the arts and sciences. While continuing its tradition of serving the residents of the Commonwealth, Worcester State University has earned a reputation for quality teaching by dedicated faculty in classes of moderate size, and for programs responsive to its students' and society's changing needs.

Accreditation

Worcester State University is accredited by the New England Association of Schools and Colleges, (NEASC). NEASC is a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Accreditation of an institution by NEASC indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the NEASC applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance of the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by the NEASC should be directed to the administrative staff of the school or college. Individuals may also contact the Association:

New England Association of Schools and Colleges
3 Burlington Woods Drive, Suite 100
Burlington, MA 01803-4514
(781) 425 7785

The following programs are accredited by their respective professional organizations: Nursing, The Commission on Collegiate Nursing Education; Speech-Language Pathology, the Council of Academic Accreditation of the American Speech-Language-Hearing Association; Occupational Therapy, Accreditation Council for Occupational Therapy Education; Nuclear Medicine Technology, the Joint Review Committee on Educational Programs in Nuclear Medicine Technology; Education, Council on

Accreditation of Education Preparation. Please refer to department chapters or department websites for addresses and telephone numbers of the accrediting organizations.

Campus

Worcester State University's 58 acre campus is nestled in the residential west side of Worcester, the second largest city in Massachusetts and New England and a dynamic college city with over 30,000 students. The campus is a short drive from tranquil forests, hiking trails and beautiful vistas and an even shorter distance from a vibrant city life that offers popular entertainment venues, award-winning restaurants, cultural museums, historic parks, and so much more. Directions are available on the website at http://www.worcester.edu/directions. The physical facilities of the Campus include the following:

Helen G. Shaughnessy Administration Building

Extensively renovated from 2007 to 2009, the Helen G. Shaughnessy Administration Building combines modern convenience and efficiency with much of the charm of the old Teachers College. The building first opened in January 1932 as Worcester State Teachers College, and was designed to accommodate 300 students with spacious classrooms, a gymnasium on the second floor, and a library on the fourth floor. Helen G. Shaughnessy was affiliated with Worcester State for 64 years—as a member of the Class of 1943, associate professor, chair of the Education Department, director of student teaching, director of personnel and labor relations, associate dean of Academic Affairs, and acting executive vice president.

Wellness Center

Worcester State University constructed a 100,000 square-foot Wellness Center which opened in 2016. The new complex features a competition gymnasium, two-court, multi-purpose gymnasium, walking track, two-floor fitness center, three multi-functional exercise rooms, golf simulator and community space.

Kalyan K. Ghosh Science and Technology Building

The Science and Technology Building is a state-of-the-art building designed to house the sciences including: Academic Computing, Communication Sciences and Disorders, Occupational Therapy, Computer Science, Biology, Biotechnology, Chemistry, Geography and Earth and Environmental Science, Geology, Natural Science and Physics, Health Science and Nursing. The building contains 30 science, therapy and computer labs; offices for faculty and staff; conference/seminar rooms; and student discussion areas. This facility also houses a 200-seat Multimedia Classroom and the Worcester State University's Mary Cosgrove Dolphin Art Gallery.

Learning Resource Center

The Learning Resource Center (LRC) houses the University Library, www.worcester.edu/library, a welcoming venue and comfortable hub for knowledge and learning, and WSU's Information Technology Services. The Library collection contains over 127,000 print books, 300 print periodicals, popular magazines, and newspapers, and 3,700 multimedia materials. On- and off-campus access to all electronic materials is available 24/7/365. These materials include over 161,000 e-books, 135,000 e-journals, and a diversified selection of 250+ databases from Proquest, EBSCO, Gale, among other authoritative publishers. In addition, the Library's Archives and Special Collections includes more than 150 linear feet of materials related to Worcester State University history, nearly 400 rare books, and the papers of poet and activist, Dennis Brutus.

The Library is open nearly 100 hours a week. Library staff provide drop-in assistance at the Research Help Desk, as well as by appointment, email, or chat. The Librarians also provide classroom instruction on information literacy and research skills in cooperation with academic department faculty. For materials desired but not found in our collections, Library patrons can request them from other libraries through our comprehensive interlibrary loan service. Moreover, the Library is a member of many local, state, and national networks, including the Academic and Research Collaborative, http://www.worcesterarc.org, a consortium of 20+ Worcester area libraries, where WSU students, faculty, and staff have full on-site access to collections and reciprocal borrowing privileges with the issuance of individualized ARC Borrowing cards. Finally, our inviting café serves beverages and light meals. Located near the Library entrance, it has become a popular gathering place for students.

Besides the Library's collections and services, the LRC is the hub for the complex of modern telecommunications and electronic learning facilities provided by Information Technology Services (ITS). The campus-wide computer network, maintained by ITS, provides wired and wireless Internet connections for student devices, for the library workstations on the 2nd floor of the LRC, and for the fully equipped Computer Lab with Help Desk on the 3rd floor. In addition, the LRC houses WSU's television studios and production facilities, multimedia laboratories, and an instructional center to support the use of multimedia resources in teaching and learning. Finally, the offices for Facilities, Publications and Printing Services, and the Communication and the Criminal Justice academic departments are located in this building along with seminar rooms, classrooms, and lecture halls.

May Street Building

Formerly known as the Temple Emanuel, this 80,000 square foot colonial revival style building was built in 1949 to house the largest Reform Jewish Congregation in the Northeast at the time. In 2012, after many years of leasing classroom space to Worcester State University, the Congregation of Temple Emanuel began exploring with Worcester State Foundation, Inc. (the University's not-for-profit fundraising affiliate) the possibility of selling the facility and its adjacent 110-space parking lot. In June of 2015, the sale was completed and the University entered into a use agreement with the Worcester State Foundation for use of the entire building. Past uses have included classroom and academic space for the Sociology Department and the hosting of a wide variety of University events in the facility's large auditorium. Future uses for the May Street Building will be determined following a 2015-2016 space evaluation.

Sagamore Road Studios

Worcester State University forged an affiliation with the Worcester Center for Crafts in 2009, a center that offers public instruction in Ceramics/Glass/Metals/ Photography, in the art and aesthetics of craft and creativity, and in the appreciation of the hand-made aesthetic object. The Worcester Center for Crafts is located in three locations: the main Sagamore Road Studios building at 25 Sagamore Road in Worcester; at 35 B New Street, home of the state-of-the-art Glass Studio; and on the campus of Worcester State University where a Darkroom Photography program is sited.

The WSU Visual & Performing Arts Department art areas are housed at the Sagamore Road Studios in the same building as the Worcester Center for Crafts; VPA offers two craft center courses as part of its Division of Graduate and Continuing Education curriculum.

Outdoor Facilities

Worcester State University has the advantage of naturally attractive surroundings. Among its outdoor facilities are an artificial turf athletic field and an eight-lane synthetic track, baseball and softball diamonds, and tennis courts.

Residence Halls

Residence Halls at Worcester State University provide housing to full-time undergraduate students.

Chandler Village is a unique living area with 63 apartments in 26 interconnected townhouses. The apartments accommodate four, five, eight, nine, ten, or eleven persons and include furnished common living and kitchen areas.

Dowden Hall, more traditional in style, is a five-story residence hall that includes single, double, and triple rooms with study and recreational lounges. There is a convenience store on the first floor and a fitness center in the basement.

Sheehan Hall, is the newest residence hall which opened Fall 2014. The facility accommodates 400 students and features the main campus dining hall overlooking the John F. Coughlin Field. Each unit consists of two double or four single rooms sharing a private bathroom. In addition to housing students, this residence hall contains Health Services, the Office of Residence Life and Housing, a multifunctional room, game room, small fitness center, student lounges, and a communal kitchen.

Wasylean Hall, named for Phillip M. Wasylean II '64, is a six-story, suite-style building with multiple study and common rooms throughout. The suites are designed to accommodate four and six people. Each unit has single and double occupancy bedrooms with

furnished common living and kitchen areas. There is a coffee shop on the first floor. Wasylean Hall is also home to the University Police.

Several housing opportunities exist which offer students the opportunity to live together, take classes together and participate in activities that focus on various special interests (See 'Services for Students' section for more information).

Student Center

The Student Center is available as a resource for the entire Worcester State University community and is conveniently situated at the geographical center of the campus. The first floor of the Student Center contains a food court area, Worcester State University bookstore, Information Desk, and the Student Print Center. The first floor also has several meeting/programming spaces including a fitness center, the Office of Student Affairs meeting rooms, Radio Station WSUR and SGA Offices, and Lancer Landing. The second floor houses the Office of Student Involvement and Leadership Development, and the Living Room—a lounge for commuters and residents with pool tables, ping-pong, video games and several TV's. The third floor contains student organizations suites along with a common lounge and dining, video game areas, and several TVs complete this space.

Sullivan Academic Center

Named for Eugene A. Sullivan, Worcester State president from 1947 to 1970, the Sullivan Academic Center is a primary instructional center on campus. It contains faculty and academic department offices, a large lecture hall (Eager Amphitheater), the Woo Café, classrooms and a large attached auditorium. The Sullivan Auditorium provides the setting for a number of formal ceremonies including the annual Senior Capping. Also located in the Sullivan Academic Center are the Center for the Study of Human Rights, and the Center for Teaching and Learning.

Change of Catalog Information

This catalog was prepared in the summer of 2017, with information available at the time of preparation. Provisions of this catalog are subject to change by order of the Massachusetts Department of Higher Education or the Worcester State University Board of Trustees. It is the policy of Worcester State University to provide advance notice of changes whenever it is reasonable and practical to do so. Changes to the Catalog need to be approved by the Associate Vice President for Academic Affairs.

Community Relations

Worcester State University values its connections with the greater community, which include partnerships with numerous individuals and organizations. The professional staff participates in events sponsored by the Commonwealth of Massachusetts, the City of Worcester, and the local Chamber of Commerce; hosts conferences, legislative meetings, and community breakfasts; sponsors seminars, lectures, and workshops; and supports a variety of initiatives in the arts and multi-cultural events. Worcester State University's calendar includes numerous programs and events to which the public is welcomed.

The Office of University Advancement is responsible for fund development and alumni relations. Annually, the office coordinates a number of special activities for Worcester State University alumni including Reunion Weekend, Homecoming, and chapter events. Fund-raising campaigns provide an array of benefits and services to current students, alumni, and friends. Contributions are used primarily for scholarships, academic awards, laboratory and classroom equipment, educational seminars, faculty research grants, and other support services to promote quality education. The office publishes a donor newsletter, manages an online alumni community, and works in partnership with both Marketing and Campus Communications to produce the *Worcester Statement*.

Campus Communications

The assistant to the president for campus communications handles media and public relations, as well as strategic communications. As chief spokesperson for the University, this individual seeks to raise the visibility and profile of the institution with the media and other key audiences. Working with the Marketing Office to edit and produce the on-line publication eNews, the assistant to the President for campus communications highlights the accomplishments of faculty, staff and students and communicates campus news.

Marketing

The Marketing Office works collaboratively with campus clients to promote Worcester State University as a distinguished public university. Worcester State University's Marketing team provides integrated marketing campaigns that include strategic brainstorming, editorial content and creative services for the University's website, publications, advertising, digital marketing and social media. The goal is for each campaign to reflect WSU's high quality, value and pride while communicating the University's story in an engaging and visual manner.

Family Educational Rights and Privacy Act

Worcester State University complies fully with the provisions of the Family Educational Rights and Privacy Act (FERPA) of 1974 as amended. This federal law protects the privacy of education records and establishes the rights of students to:

1. Inspect and review their education records within 45 days of the day Worcester State receives a request for access.
   Students should submit to the Registrar, dean, head of the academic department or other appropriate official, written requests that identify the record(s) they wish to inspect. The Worcester State University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the Worcester State University official to whom the request was submitted does not maintain the records, that official shall advise the student of the correct official to whom the request should be addressed.
2. Request the amendment of the education records that the student believes are inaccurate or misleading.
   Students may ask Worcester State University to amend a record that they believe is inaccurate or misleading. They should write to the Worcester State University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
   If Worcester State University decides not to amend the record as requested by the student, Worcester State University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. To file a complaint with the U.S. Department of Education concerning the alleged failures by Worcester State University to comply with the requirements of FERPA, the name and address of the office that administers FERPA is:

   Family Policy Compliance Office • Department of Education
   Independence Avenue, SW • Washington, DC 20202-4605

Worcester State University accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to nor will the institution disclose any information from students' educational records without the written consent of students with the exception of the following:

- Worcester State University officials within the institution
- officials of other institutions in which students seek to enroll
- persons or organizations providing students' financial aid
- accrediting agencies carrying out their accreditation function
- persons in compliance with a judicial order
- persons in an emergency in order to protect the health or safety of students or other persons.

All these exceptions are permitted under the Act. A Worcester State University official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. A Worcester State University official is:

- a person employed by Worcester State University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff)
- a person or company with whom Worcester State University has contracted (such as a consultant, contractor, volunteer or other party to whom Worcester State University has outsourced institutional services or functions)
- a person serving on the Board of Trustees

- a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

According to the law, a person becomes a student for purposes of FERPA when they are "in attendance" at an institution. This includes attendance in person or remotely by videoconference, satellite, internet or other electronic and telecommunication technologies. At WSU, a student is defined as someone currently or previously enrolled in any academic offering of the University. This does not include prospective students or applicants to any academic program of the University. A student is an individual who has paid an admission deposit (acceptance fee), registered for classes, or otherwise entered into a contractual relationship with the university to receive instruction. FERPA becomes effective on the first day of classes for those newly admitted students who have scheduled at least one course. A student who accepted an admission offer but did not schedule at least one course, or newly admitted student who cancelled his/her registration either before or after the semester begins, is not covered by FERPA.

At its discretion the institution may provide directory information in accordance with the provisions of the Act to include:

- student's name
- address
- photograph
- date and place of birth
- major field of study
- grade level
- degree
- recent school attended
- enrollment status
- dates of attendance
- weight and height of athletic teams
- honors/awards
- participants in officially recognized activities and sports

Directory information does NOT include a student's social security number or student identification number.

Currently enrolled students may withhold disclosure of directory information by notifying the Registrar in writing of the request prior to the end of the first week of classes in the Fall. Such requests will be honored for the duration of the academic year—September through August; therefore, authorization to withhold directory information must be filed annually with the Registrar. Worcester State University assumes that failure on the part of the student to specifically request the withholding of categories of directory information indicates individual approval of disclosure.

A request to withhold the above data in no way restricts internal use of the material by Worcester State University.

In compliance with the Family Educational Rights and Privacy Act of 1974, as amended, Worcester State University reserves the right to disclose information to parents of a student under 18 and/or the parents of a student who is dependent upon such parents for federal income tax purposes.

Mission

Worcester State University champions academic excellence in a diverse, student-centered environment that fosters scholarship, creativity, and global awareness. A Worcester State education equips students with knowledge and skills necessary for lives of professional accomplishment, engaged citizenship, and intellectual growth. - See more here.

Policy on Nondiscrimination

The University is committed to a policy of nondiscrimination, equal employment opportunity, and affirmative action in its educational programs, activities, and employment practices.

The University is dedicated to providing educational, working and living environments that value the diverse backgrounds of all people. The University does not unlawfully discriminate in admission or access to, or treatment or employment in, its educational programs and activities on the basis of race, color, religion, national origin, age, disability, gender, sexual orientation, gender identity, gender expression, genetic information, marital or parental status, or veteran status.

The University prohibits unlawful discrimination or discriminatory harassment on all of those bases. Such behaviors violate the University's Non-Discrimination, Harassment, and Retaliation Policy, will not be tolerated, and may result in disciplinary action up to and including termination or expulsion. It is also the policy of the University to provide each student, employee, and other persons having dealings with the institution an environment free from unlawful sexual violence and all forms of misconduct on the basis of gender. The University prohibits rape, statutory rape, sexual assault, sexual exploitation, incest, sexual harassment, gender-based harassment, domestic violence, dating violence and stalking, and retaliation. These behaviors violate the Universities' Sexual Violence Policy, will not be tolerated, and may result in disciplinary action up to and including termination or expulsion.

The University Non-Discrimination, Discriminatory Harassment and Retaliation Policy and Sexual Violence Policy applies in all University programs and activities, including, but not limited to, athletics, instruction, grading, housing, and employment. They apply to all members of the campus communities, including, but not limited to, students, faculty, librarians, staff, visitors, contractors and applicants for employment or admission. They also apply to off-campus conduct that negatively affects a community member's experience in the University environment.

The University has appointed an Equal Opportunity Officer ("EO Officer") to oversee its compliance with this Plan, as well as the state and federal non-discrimination and equal opportunity laws. Anyone with questions, concerns or complaints regarding discrimination, discriminatory harassment or retaliation may contact the EO Officer. Any person with questions or concerns about any form of sexual violence, sexual harassment, gender-based harassment, domestic violence, dating violence and stalking and/or retaliation may also contact:

Discrimination:

Isaac Tesfay; Director of Diversity, Inclusion, Affirmative Action, and Equal Opportunity; 508-929-8784

Student Accessibility:

Fran Manocchio; Director of Student Accessibility Services; 508-929-8733

Title IX / Sexual Violence:

Rosemary Naughton; Office of Student Affairs; Title IX Coordinator; 508-929-8964

The U.S. Department of Education Office for Civil Rights 33 Arch Street, 9th Floor Boston, MA 02119-1424 (617) 289-0111 Fax (617) 289-0150; TDD (877) 521-2172 OCR.Boston@ed.gov or the University's Title IX Coordinator.

The Title IX Coordinator at each University is responsible for the University's compliance with Title IX and the administration of the Universities' Sexual Violence Policy.

TITLE IX/Policies and Inquiries

Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, prohibits discrimination based on gender in all programs or activities that receive federal financial assistance.

A primary purpose of the Massachusetts Board of Higher Education's Diversity and Sexual Violence Plan is to inform campuses in the Massachusetts State University System of each university's prohibition of all forms of discrimination, discriminatory harassment, sexual violence, sexual and gender-based harassment, domestic violence, dating violence, stalking and retaliation; efforts to prevent such behaviors; and the manner in which each university will respond to such behaviors, including the prompt, impartial, fair and thorough investigation and resolution of complaints.

Title IX forbids sex discrimination in all university Student Services and Academic programs including, but not limited to, Admissions, Financial Aid, Academic advising, Office of Residence Life and housing, Athletics, Health Services, Counseling, Office of Student Accessibility Services, Registrar's office, and classroom assignments, grading and discipline.

Title IX also forbids discrimination because of sex in employment and recruitment consideration or selection, whether full or part time, under any education program or activity operated by an institution receiving or benefiting from federal financial assistance.

Worcester State University has equitable procedures in place to promptly, thoroughly and fairly address concerns and complaints of harassment or discrimination while being mindful of the rights and unique needs of all parties and of due process.

In certain instances Title IX issues may impact a student's academic performance and decisions regarding withdrawals, repeats, and the ability to continue in high-stakes programs need to be made. Academic accommodations related to Title IX will be handled on a case by case basis by the Provost and Vice President for Academic Affairs or her/his designee.

Complaints and reports may be made by contacting Rosemary Naughton, Associate Dean of Students and Title IX Coordinator at 508-929-8964 or wsu_titleix@worcester.edu. (wsu_titleix@worcester.edu)

For more information, please visit the Title IX website.

Undergraduate Studies

Academic Programs

Worcester State University awards the Bachelor of Arts (BA) and the Bachelor of Science (BS) degree in 27 academic programs. Worcester State University also offers Minors in 33 academic disciplines as well as 5 Interdisciplinary Minors or Concentrations.

Program	Major	Minor/IC[1]	Sponsoring Department
Art		X (p. 253)	Visual & Performing Arts
Bioinformatics		IC (p. 134)	Biology, Biotechnology, Chemistry, Computer Science
Biology	BS (p. 130)	X (p. 136)	Biology
Biotechnology	BS (p. 138)		Biology
Business Administration	BS (p. 273)[2]	X (p. 279)	Business Administration & Economics
Chemistry	BS (p. 148)	X (p. 154)	Chemistry
Communication	BA (p. 285)[2]	X (p. 290)	Communication
Communication Sciences & Disorders	BS (p. 157)	X (p. 160)	Communication Sciences & Disorders
Computer Science	BS (p. 168)	X (p. 170)	Computer Science
Criminal Justice	BS (p. 296)[2]	X (p. 298)	Criminal Justice
Early Childhood Education	BS (p. 176)		Education
Economics	BS (p. 302)	X (p. 305)	Business Administration & Economics
Elementary Education	BS (p. 182)		Education
English	BA (p. 314)[2]	X (p. 317)	English
Environmental Science	BS (p. 191)		Earth, Enivronment & Physics
French		X (p. 414)	World Languages
Geography	BS (p. 202)	X (p. 205)	Earth, Environment & Physics
Global Studies		IC (p. 104)	Interdisciplinary Program
Health Education	BS (p. 209)[2]	X (p. 211)	Health Sciences
Health Fitness		X (p. 211)	Health Sciences
History	BA (p. 326)[2]	X (p. 329)	History & Political Science
Information Technology		X (p. 112)	Computer Science
Intergenerational Studies and Community Service		X (p. 392)	Urban Studies
Liberal Studies	BA/BS (p. 113)[2]		Interdisciplinary Program
Mathematics	BS (p. 225)	X (p. 226)	Mathematics
Middle East Studies		X	History & Political Science
Middle School Education		X (p. 185)	Education
Music		X (p. 266)	Visual & Performing Arts
Nuclear Medicine		IC (p. 135)	Biology, Chemistry, UMASS Medical School Instruction
Nursing	BS (p. 229)		Nursing
Occupational Studies	BS (p. 245)		Occupational Therapy
Philosophy		X (p. 349)	Philosophy

Physics		X (p. 251)	Earth, Environment & Physics
Political Science		X (p. 354)	History & Political Science
Psychology	BS (p. 361)[2]	X (p. 365)	Psychology
Psychology-Biology		X (p. 360)	Psychology & Biology
Public Health	BS (p. 213)[2]	X (p. 216)	Health Sciences
Public Health (WSU)/Nursing (MCPHS University)	BS/BSN (p. 211)		Health Sciences/ MCPHS University
Secondary Education		X (p. 187)	Education
Sociology	BS (p. 370)[2]	X (p. 371)	Sociology
Spanish	BA (p. 418)	X (p. 422)	World Languages
Sport Coaching		X (p. 248)	Health Sciences
Theatre		X (p. 267)	Visual & Performing Arts
Urban Studies	BS (p. 392)[2]	X (p. 395)	Urban Studies
Visual & Performing Arts	BA (p. 253)		Visual & Performing Arts
Women's Studies		IC (p. 114)	Interdisciplinary Program

[1] Interdisciplinary Concentration (IC)

[2] Majors that are also offered in the evening.

Admissions

Worcester State University seeks to enroll students who will succeed academically, thrive socially, and contribute meaningfully to the campus community. More information can be found in this section of the catalog.

- Admission Following Withdrawal from Worcester State or Leave of Absence (p. 18)
- Admission to Non-Degree Programs (p. 19)
- Advanced Placement (AP) Guidelines (p. 19)
- Alternatives for Individual Development (A.I.D.) (p. 20)
- American Council on Education (ACE) College Credit Recommendation Service (CREDIT) (p. 20)
- Application Process (p. 20)
- College Level Examination Program (CLEP) (p. 22)
- Commonwealth Commitment (p. 23)
- Delayed (deferred) Enrollment (p. 24)
- DHE Massachusetts High School Unit Requirements (Academic Courses) (p. 24)
- Documentation of High School Diploma or Equivalency (p. 25)
- Evening Undergraduate Course Offerings (p. 25)
- Exceptions (p. 25)
- First-Year Student Admission (p. 26)
- GED/HiSET Recipients (p. 26)
- International Applicants (p. 26)
- International Baccalaureate (IB) Credit (p. 27)
- MassTransfer (p. 28)
- Non-Traditional Applicants (p. 29)
- Post-Baccalaureate Pre-medical and Health Professions Program (p. 29)
- Pre-entrance Immunization Requirements (p. 31)
- Second Baccalaureate Degree (p. 31)
- Special Admission (p. 31)
- Special Non-Matriculated Students (p. 31)
- Student Right-to-Know Act (p. 31)
- The $30K Commitment (p. 31)
- Transfer Student Admission (p. 32)
- Transferring Credit from Other Institutions (p. 32)
- Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy) (p. 33)

Admission Following Withdrawal from Worcester State or Leave of Absence

Matriculated students who fail to take a course during a calendar year will be administratively withdrawn from Worcester State. Students who wish to permanently withdraw from Worcester State or take a temporary leave of absence must complete appropriate forms in the Academic Success Center. If the withdrawal or leave of absence is filed prior to the last day to withdraw from courses for the term, "W" will be recorded on the student's record. Students who file for leave of absence or withdrawal after the last day to withdraw from courses for the term may petition if they feel circumstances warrant the recording of "W" for all courses enrolled for that term. Normally, a leave of absence is for one semester; however, a student may have up to one year to return to Worcester State. Failure to return at the specified time will result in an administrative withdrawal from Worcester State.

Re-activation of Degree Status

There are two procedures in which students can reactivate their matriculation status at Worcester State after withdrawal/non-continuous attendance/ dismissal: readmission and reinstatement.

Readmission

If students have accumulated any undergraduate, college-level credit prior to seeking reactivation of the degree status and are not applying for the Nursing and Occupational Studies majors, they should apply for readmission through the Admissions office. Applications are available in the Admissions Office (Administration Building, Room 248) and online at http://www.worcester.edu/apply.

Reinstatement

If students have not accumulated any college-level undergraduate credits prior to seeking reactivation of their degree status and are not applying for: Nursing and Occupational Studies majors, they should apply for reinstatement directly through the Registrar's

Office (Administration Building, Room 107). Deadline for Fall-July 1; Spring-November 1; Summer-April 1. It is each student's responsibility to supply and update the following documents if not already on file.

- final high school transcript
- completed proof of residency form
- official transcript of all courses completed at each post-secondary institution attended (excluding Worcester State).

Upon completion of any missing data, the student's file will be reviewed and a plan for academic persistence and success will be developed. Students then must meet with an advisor in the declared major to register for classes.

Academic Progress after reinstatement/readmission

It is expected that students must attain a minimum GPA of 2.0 for each semester following their return. Failure to maintain a 2.0 overall average will result in a second separation from Worcester State not subject to appeal.

All reinstated students follow the degree, program, and graduation requirements from the catalog in effect at the time of their reactivation, not those in effect at the time of their withdrawal. Students need to attend Worcester State for at least one semester prior to graduation certification.

Admission to Non-Degree Programs

Applicants who have already earned a bachelor's degree and wish to complete a second major, including all education license programs, should specifically request an undergraduate application form. Applicants who have completed a Non-Licensure program in Early Childhood Education may apply for a Non-Degree Licensure Education program. Such applicants must have a minimum of three (3) years teaching experience and have completed the equivalent of a second major in liberal arts and sciences.

Advanced Placement (AP) Guidelines

AP Exam	Score	WSU Course Equivalent	Credits
Art History	3, 4, 5	AR-112 & AR-113	6
Art 3D Design	3, 4, 5	AR-122	3
Biology	3, 4, 5	Biology, no specific classes; LASC NSP credit	6
Calculus AB	3, 4, 5	MA-200	4
Calculus BC	3, 4, 5	MA-201	4
Calculus AB Subscore (score given with Calculus BS exam)	3, 4, 5	MA-200	4
Chemistry	3, 4, 5	CH-120	4
Computer Science A	3, 4, 5	CS-140	4
Computer Science Principals	3, 4, 5	CS-101	3
English Language/ Composition	3, 4, 5	EN-101 & EN-102	6
English Literature/ Composition	3, 4, 5	EN-105	3
Environmental Science	3, 4, 5	Environmental Science Elective; LASC NSP credit	3
European History	3, 4, 5	History Elective	6
Government & Politics of the US	3, 4, 5	PO-210	3
Government & Politics Comparative	3, 4, 5	PO-220	3
Human Geography	3, 4, 5	GE-102	3
French	3, 4, 5	FR-101 & FR-102	6
German	3, 4, 5	World Language Elective	6
Spanish	3, 4, 5	SP-210 & SP-211	6
Spanish Lit	3, 4, 5	SP-1XX	3
Microeconomics	3, 4, 5	EC-110	3

Macroeconomics	3, 4, 5	EC-120	3
Music Theory	3, 4, 5	MU-100	3
Physics B[1]	3, 4, 5	PY-221 & PY-222	8
Physics 1 - Algebra based sequence	4, 5	PY-221	4
Physics 2 - Algebra based sequence	4, 5	PY-222	4
Physics C - Mechanics	4, 5	PY-241	4
Physics C - Electricity & Magnetism	4, 5	PY-242	4
Psychology	3, 4, 5	PS-101	3
Statistics	3, 4, 5	MA-150	3
Studio Art	3, 4, 5	AR-140	3
United States History	3, 4, 5	HI-111 & HI-112	6
World History	3, 4, 5	HI-103 & HI-104	6

[1] Discontinued Exam

Updated 5/17

Alternatives for Individual Development (A.I.D.)

The Alternatives for Individual Development Program (A.I.D.) is an alternative admissions program at WSU that provides educational assistance to under-represented prospective students who demonstrate the desire to succeed in college, including those who are ALANA and low income and/or would be the first in their families to attend college.

To be eligible, students must be incoming first-year students, meet the minimum admissions requirements, be a Massachusetts resident, and a U.S. Citizen and/or permanent resident. To apply, complete an undergraduate application and select "Yes" to question #19 on the application. Letters of recommendation from a school counselor and a high school teacher are required to complete the application.

American Council on Education (ACE) College Credit Recommendation Service (CREDIT)

Training programs in professional settings, industry, the armed forces and other institutions, offer educational opportunities that may be similar in content to Worcester State University courses. Transfer credit may be awarded for professional training programs through credit recommendations made by organizations that have evaluated such programs on the basis of college-level learning. The American Council on Education is the largest organization that evaluates training programs. Students who have completed ACE-evaluated programs, including military service, are encouraged to request an official ACE Transcript for evaluation. Students may not receive transfer credit for professional training if they have already received transfer credit for similar learning at colleges previously attended. Information on professional trainings that have been evaluated and transcript services can be found at http://www.acenet.edu/credit.

Application Process

Directions for First-Year Applicants

Students may apply online at http://www.worcester.edu/apply.

Applications may be obtained from the Admissions Office, Worcester State University, 486 Chandler Street, Worcester, MA 01602-2597, 508-929-8040.

Each applicant must submit the following materials:

- A completed Worcester State application form
- Payment of an application fee: $50 for all applicants.
- An official copy of the high school transcript including first-quarter senior grades (Transcripts are deemed official only when sent directly to the Admissions Office from the high school.)
- An official copy of an SAT or ACT score report. Student's whose language of instruction is not English, must submit TOEFL, IELTS or a

comparable exam score report. Test results should be submitted directly to Worcester State from the testing agency.

NOTE: Effective for fall 2018 admission, first-year applicants may opt-out from submitting SAT or ACT scores. Some exceptions apply, such as nursing, occupational studies, and home-schooled applicants. Refer to our test-optional policy at http://www.worcester.edu/test-optional.

High school students must request an official high school transcript that includes at least the first marking period of the senior year. Also, a final high school transcript must be requested at the time of graduation that indicates successful completion of the requirements to graduate from high school. The Admissions Office must receive this official, final high school transcript before registration for courses and the final award of financial aid is approved. All transcript materials requested by the applicant become the property of Worcester State and cannot be released to the applicant or to other institutions, agencies, or individuals.

First-Year Priority Application Filing Dates

All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

Fall Semester Early Action (first-year applicants only)	November 15
Nursing (BSN) and Occupational Studies (BSOS) - Fall only	January 15 (firm)
Fall Semester Regular Decision (September entrance)	March 1
Spring Semester (January entrance)	November 15

After these dates, contact the Admissions Office to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their applications after the priority filing dates.

All pertinent deposits and the orientation fee are due on or before May 1 for those students who meet the priority deadlines.

No Spring applications will be accepted for Nursing (BSN - track I) or Occupational Studies (BSOS).

Directions for Transfer Student Applicants

Transcripts from colleges or universities previously attended are the primary factor in determining acceptance to Worcester State. To be considered a transfer applicant, a student must have successfully completed the requirements listed on page 19 at a regionally accredited college or university. The following materials must be supplied:

- A completed Worcester State application form.
- Payment of an application fee: $50 for all applicants.
- An official final high school transcript, indicating proof of graduation from an accredited high school or a high school equivalency certificate indicating the test scores received. These must be received by the Admissions Office before clearance for registration or the award of financial aid is approved.
- An official transcript of all courses completed at each post-secondary institution attended (transcripts are deemed official only when sent directly to the Admissions Office from the previous colleges or universities).
- Transcripts and other documents submitted in languages other than English must be accompanied by an English translation and course-by-course evaluation (if applicable) from a recognized agency or organization. For a list of approved evaluating agencies please contact the Admissions Office. Students wishing to transfer in credit completed at a non-U.S. institution must be prepared to submit a course description and/or syllabus to the appropriate department chair in order to be granted credit.

Transfer Priority Application Filing Dates

All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

Fall Semester (September entrance)	May 1
Spring Semester (January entrance)	November 15
Nursing (BSN) (Fall enrollment only - limited space into the first-year level)	January 15 (firm)
LPN to BSN (September entrance)	February 1
RN to BSN (September entrance)	May 1

After these dates, contact the Admissions Office to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their applications after the priority filing dates.

All pertinent deposits and the orientation fee are due on or before May 1 for those students who meet the priority deadlines.

College Level Examination Program (CLEP)

Subject	Pass Score	WSU Course Equivalent (if Equivalent)	Credits
Business			
Financial Accounting	50	BA-210	3
Information Systems & Computer Applications	50	CS-101	3
Introductory Business Law	50	BA-320	3
Principles of Accounting [1]	50	BA-210 & BA-220	6
Principles of Management	50	BA-200	3
Principles of Marketing	50	BA-318	3
Composition & Literature			
American Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 63) English Humanities Elective Not accepted for English major/minor	6
Analyzing & Interpreting Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 63) English Humanities Elective Not accepted for English major/minor	6
College Composition	50	EN-101	3
English Composition with Essay [1]	50	EN-101	3
College Composition Modular		Not Accepted	NONE
English Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 63) English Humanities Elective Not accepted for English major/minor	6
Freshman College Composition		Not Accepted	NONE
Humanities	50	LASC TLC - Thought, Language, Culture & Creative Arts (p. 47) General Elective	6
Foreign Languages			
French Language, Level 1	50	FR-101 & FR-102	6
French Language, Level 2	62	FR-101, FR-102, FR-210, & FR-211	12
German Language, Level 1	50	Foreign Language Elective WL-XXX	6
German Language, Level 2	62	Foreign Language Elective WL-XXX	12
Spanish Language, Level 1	50	SP-101 & SP-102	6
Spanish Language, Level 2	63	SP-101, SP-102, SP-210, & SP-211	12
History & Social Science			
American Government	50	PO-210	3

History of the US 1: Early Colonization to 1877	50	HI-111	3
History of the US 2: 1856 to Present	50	HI-112	3
Human Growth & Development	50	PS-210	3
Introduction to Educational Psychology	50	ED-250[2]	3
Introductory Psychology	50	PS-101	3
Introductory Sociology	50	SO-100	3
Principles of Macroeconomics	50	EC-120	3
Principles of Microeconomics	50	EC-110	3
Social Sciences & History	50	LASC GP - Global Perspectives (p. 54) LASC - USW - US & Its Role in the World General Elective	6
Western Civilization I: Ancient Near East to 1648	50	LASC GP - Global Perspectives (p. 54) History Elective	3
Western Civilization II: 1648 to Present	50	LASC GP - Global Perspectives (p. 54) History Elective	3
Science & Mathematics			
Biology	50	LASC NSP - Natural Systems & Processes (p. 59) Biology Elective	6
Calculus	50	MA-200	4
Chemistry	50	LASC NSP - Natural Systems & Processes (p. 59) General Elective	4
College Algebra	50	MA-180	3
College Mathematics	50	LASC QR/MA - Quantitative Reasoning (p. 61) Mathematics Elective Not acccepted for Math major/minor	3
Pre-calculus	50	MA-190	3
Natural Sciences	50	LASC NSP - Natural Systems & Processes (p. 59) General Elective	3

1 No longer available but credits can be accepted

2 10 hrs clinical fieldwork per department guidelines are required

Commonwealth Commitment

This program allows students to earn an Associate's Degree in specific academic programs at any of the Massachusetts community colleges and transfer to complete a Bachelor's Degree from Worcester State University. Students earn an Associates and Bachelor's degree in four years with the possibility of a tuition and fee rebate. To qualify, students must be full-time, non-residential, in-state residents, college-ready, and maintain continuous enrollment and cumulative 3.0 grade point average. For more information, visit http://www.worcester.edu/commonwealth-commitment or email transfer@worcester.edu.

Reverse Transfer

Through Reverse Transfer, students who made progress toward an associate degree at a Massachusetts community college prior to transferring may apply credit earned at a Massachusetts state university or University of Massachusetts campus back to their community college to complete associate degree requirements. Massachusetts community college students are eligible if they have earned at least 30 college-level credits with a minimum cumulative GPA of 2.00 without earning an associate degree. For more information, including additional eligibility requirements, please visit http://www.mass.edu/masstransfer.

Delayed (deferred) Enrollment

A student may apply for admission and, if accepted, decide to delay their enrollment. Students must submit a request in writing to the Admissions Office specifying which start term they intend to enroll (which may not to exceed one year from the original accepted start term). Students who request to delay their admission forfeit any merit scholarship, financial aid, and/or housing offered with the original acceptance. Requesting a delayed enrollment does not guarantee a student's later acceptance for the deferred start term. A student's application will be reviewed in the context of the newer applicant pool. More selective admission standards may apply. Students are encouraged to supply a statement explaining their activities while not enrolled in a post-secondary institution. As part of the re-evaluation process, students will be reconsidered for merit scholarships (Fall start only), financial aid, and housing.

DHE Massachusetts High School Unit Requirements (Academic Courses)

Subject	Units
English	4
Mathematics	4 (Algebra I & II and Geometry or Trigonometry, or comparable coursework and math in the senior year)
Natural Science	3 (including 3 with lab)
Social Science	2 (including U.S. History)
Foreign Language	2 (in a single language)
Electives	2

Minimum Grade Point Average in Required Courses

The grades earned in academic courses are re-calculated into a grade point average (GPA). In re-calculating GPA, extra weight is received for honors (0.5) and Advanced Placement (1.0) courses. Non-academic courses are not included; therefore, the GPA calculated by Worcester State may be different than the GPA calculated by a high school.

Grades will be converted to a 4.0 scale, where "A" = 4.0, "B" = 3.0, "C" = 2.0, and "D" = 1.0. On this scale, a 3.0 GPA is equal to a "B" average. A 3.0 minimum GPA is required unless the student attains one of the GPA/SAT combinations listed in the chart below.

SAT or ACT Test Requirement

For students with a GPA of 3.0 or above, Worcester State reserves the right to establish additional criteria, such as a minimum SAT or ACT score and/or minimum class standing.

For those students with a GPA below 3.0, a clear-cut SAT/ACT score will be applied as a minimum standard in accordance with the Massachusetts Department of Higher Education Scale below.

NOTE: Effective for fall 2018 admission, first-year applicants may opt-out from submitting SAT or ACT scores. Some exceptions apply, such as nursing, occupational studies, and home-schooled applicants. Refer to our test-optional policy at http://www.worcester.edu/test-optional.

GPA	SAT[1]	ACT
2.51-2.99	990	19
2.41-2.50	1030	20
2.31-2.40	1070	21
2.21-2.30	1110	22
2.11-2.20	1140	23
2.00-2.10	1180	24

[1] Based on highest Evidenced-based Reading and Writing (EBRW) and Math (M) Score.

- The Occupational Studies program requires a 3.00 and 1080 SAT (EBRW&M) or 1000 SAT (CR&M), or 21 ACT minimum.
- The Nursing program requires a 3.20 and 1130 SAT (EBRW&M) or 1050 SAT (CR&M), or 22 ACT minimum.

- The Public Health/Pre-Nursing dual degree program requires a 3.00 GPA and 1070 SAT (EBRW&M) or 1000 SAT (CR&M), or 21 ACT minimum.
- No applicant with a high school GPA less than 2.00 will be admitted to a state university.

NOTE: The Massachusetts Department of Higher Education Scale is subject to change. Students who have graduated from high school more than three years ago and have never attended college should apply as non-traditional students (see section on next page) and may present SAT/ACT scores at their option.

Documentation of High School Diploma or Equivalency

All new incoming matriculating students must provide proof of completing high school by providing documentation of a high school diploma or equivalency. The University will accept any of the following:

- An official high school transcript sent directly from the high school stamped with the date of graduation.
- An official GED transcript sent directly from the issuing agency.
- Original high school diploma or original GED certificate brought to the Admissions Office (photocopy retained).
- For records that are unobtainable or destroyed, applicants may submit a letter from the school superintendent (on official letterhead and with high school seal) indicating date of graduation and/or completion of high school or home school education.
- If a letter from a school superintendent is not available for missing or destroyed records, students may submit a signed statement explaining lack of availability to the Director of Admissions for consideration.
- Those documents awarded from a country outside of the U.S. must be translated and evaluated to U.S. standards through a credential evaluating agency.
- The acceptability of a high school diploma is determined by an evaluation of the institution's accreditation and curriculum. A high school diploma may be accepted if recognized by the state in which it was issued as offering a curriculum consistent with state law. Certificates of completion and diplomas representing non-academic curriculum will not be accepted.

Evening Undergraduate Course Offerings

Continuing Education undergraduate course offerings are available for matriculated and non-matriculated students. Matriculated students have the ability to register for evening Continuing Education classes during regular pre-registration periods for Fall and Spring semesters but may incur additional costs in tuition and fees. The Bursar's Office can assist in determining if additional costs will be incurred. During the Summer and Winter sessions, Continuing Education offers a wide variety of face-to-face and online classes. Matriculated students looking to "catch up" on credits or wanting to accelerate degree completion may take classes during these additional terms by registering and paying for classes. Continuing Education classes are available to all non-matriculated students. Instruction in Continuing Education courses is provided by Worcester State faculty and qualified adjunct faculty.

Exceptions

Documented Learning Disability

Students with a documented learning disability, do not have to submit test scores such as the SAT or ACT for admission to Worcester State. However, they must submit educational testing and assessment completed within the last three years and a copy of the Individual Education Plan (IEP) Students with learning disabilities must still complete the required 17 academic units with a minimum GPA of 3.0. First-year student applicants with a language-based learning disability may substitute two alternate academic electives for the foreign language course requirements. Applicants on a Section 504 Plan must meet all Department of Higher Education requirements.

English as a Second Language (ESL) Students

ESL students are eligible for exceptions to the admission requirements. For example, they may substitute two course electives for the two required foreign language courses. They must also take the Test of English as a Foreign Language (TOEFL) or IELTS and SAT and should contact their guidance counselor or the Admissions Office for more information.

Vocational-Technical Students

Vocational-technical students must complete 17 academic courses, distributed in the same manner and with the same minimum grade point averages required of other high school graduates, with the following exceptions:

- Two vocational-technical courses may be used to fulfill the two required electives.
- Vocational-technical high school graduates who do not complete the two required academic foreign language courses must complete an additional elective college academic for a total of three such courses, and satisfy one of the following options:

1. Complete at least one Carnegie unit of foreign language;
2. Complete a fourth Carnegie unit of mathematics or science, which need not be a laboratory course; or
3. Complete one Carnegie unit of computer science.

Note: A Carnegie unit represents a full academic year of study or its equivalent in a specific subject.

This requirement will remain in effect until the Department of Education (DOE) implements its requirements regarding foreign language study for vocational-technical students. At that time, vocational-technical applicants for admission to Worcester State University will be required to meet DOE requirements for foreign language study.

First-Year Student Admission

A student's high school academic record is the single most important factor in WSU's evaluation process for first-year student admission. The quality and level of courses, grade point average, and grade trends are all important factors. SAT and/or ACT scores are optional for most applicants. Refer to http://www.worcester.edu/test-optional for policy guidelines. Work experience and extracurricular activities may strengthen overall credentials for admission. A personal essay and recommendation letters are not required but may add support to an application. The TOEFL or IELTS is required for students who are not native speakers of English. Specific requirements for competitive majors such as Nursing and Occupational Studies and Public Health/ Pre-Nursing are described in the selective majors section.

Worcester State determines first-year and transfer student admission eligibility in accordance with the published standards established by the Massachusetts Department of Higher Education (MDHE). Meeting these minimum standards does not guarantee admission to Worcester State.

GED/HiSET Recipients

Candidates for admission who have completed the high school diploma requirement by earning the General Equivalency Diploma (GED) or the High School Equivalency Testing Program (HiSET) must submit official score reports and an official copy of their high school transcript showing work completed and/or attempted with grades earned. GED/HiSET applicants must also submit official SAT score reports if their high school class would have graduated within the last three years.

International Applicants

Worcester State welcomes qualified international applicants. No international applicants will be considered for the Spring semester unless:

- They are currently enrolled in an ESL program in the U.S.
- They are currently attending a U.S. college or university.
- They currently have a visa status that legally allows them to change to F-1.
- They were accepted for a previous semester but deferred attendance due to being refused a visa.

All of the documents listed below must be submitted before April 1 for the Fall semester (January 15 for Fall only Nursing - BSN and Occupational Studies Majors).

- Official high school/secondary school transcripts or national exam reports accompanied by formal evaluation by a professional evaluating agency. Transcripts not in English must be accompanied by a notarized English translation.
- Official college or university transcripts accompanied by a course-by-course formal evaluation by a professional evaluating agency in the U.S. (for courses taken outside the U.S.).
- Official English proficiency examination results must be submitted to Worcester State University directly from the testing agency, for all applicants who have studied in a country where English is not the native language. Examinations and minimum scores accepted by Worcester State University can be found below. For additional information, please contact the WSU Admissions Office at 508-929-8040 or the WSU Intensive English Language Institute (IELI) at 508-929-8120.
  - PBT TOEFL 520
  - CBT TOEFL 190
  - IBT TOEFL 71
  - IELTS 6.0
  - Pearson PTE 50
  - DAAD B2
  - EIKEN Pre-1
  - iTEP 3.5
- Applicants who have earned an Associate of Arts or Associate of Science degree from a regionally accredited U.S. college or university are not required to submit a TOEFL or IELTS score.
- Official results of the SAT or ACT are required for all first-year student applicants who have graduated from a secondary school within the past three years.
- Completed and notarized WSU Financial Affidavit form with appropriate backup documentation, all educational expenses incurred while at Worcester State for one academic year (currently a minimum of $33,070 U.S. dollars[1]).
- A copy of the identification page of the student's passport.
- International applicants, who have attended another college or university or secondary school in the U.S., must forward a copy of their Form I-20 with their application.

Transcripts and other documents submitted in languages other than English must be accompanied by an English translation and course-by-course evaluation (if applicable) from a recognized agency or organization. For a list of approved evaluating agencies, please contact the Admissions Office. Students wishing to transfer in credit completed at a non-U.S. institution must be prepared to submit a course description and/or syllabus to the appropriate department chair in order to be granted credit.

Worcester State will not issue a Form I-20 to international applicants until the tuition deposit is paid. The tuition deposit deadline for the Fall semester is May 1st. There will be no exceptions to this deadline.

[1] Subject to change

International Baccalaureate (IB) Credit

The following equivalencies have been established for High-Level IB exams. Students who receive an IB Diploma and meet minimum honors admission criteria will be invited to participate in WSU's Honors Program.

Exam	Score 4	Score 5-7
Biology	BI-101 (4)	BI-101 (4)
Business & Management	BA-1XX (3) (elective)	BA-200 (3)
Chemistry	CH-110 (4)	CH-120 (4)
Computer Science	CS-101 (3)	CS-101 (3)
Economics	No Credit	EC-110 (3) **and** EC-120 (3)
English A1 (HL)	EN-105 (3)	EN-105 (3)
Film	CM-241 (3)	CM-241 (3) **and** CM-2XX (3)

Geography	GE-102 (3)	GE-102 (3)
History	HI-2XX (European elective) (3)	HI-2XX (European elective) (3)
Information & Technology for a Global Society (ITGS)	No Credit	UR-230 (3)
Mathematics	MA-200 (4)	MA-200 (4) **and** MA-201 (4)
Modern Languages	SP-101/FR-101/ WL-101 (3) **and** SP-102/FR-102/ WL-102 (3)	SP-210/FR-210/ WL-210 (3) **and** SP-211/FR-211/ WL-211 (3)
Music	MU-100 (3)	MU-100 **or** MU-101 **or** MU-115 (3)[1]
Philosophy	PH-100 (3)	PH-100 (3) **and** PH-110 (3)
Physics	No Credit	PY-105 (3)
Social & Cultural Anthropology	SO-110 (3)	SO-110 (3) **and** SO-2XX (3)
Theatre Arts	TH-191 (3)	TH-191 (3)
Visual Arts	AR-100 (3)	AR-100 (3) **or** AR-112 **or** AR-113 (3)[1]

[1] Consult with department.

MassTransfer

MassTransfer is a collaboration between the Commonwealth's community colleges, state universities, and the University of Massachusetts. System-wide resources and policies allow for students to transfer seamlessly, stay on track and minimize the time it takes to earn a bachelor's degree. For more information, please visit http://www.mass.edu/masstransfer.

Benefits for students who complete associate's degrees under MassTransfer are:

Minimum Final GPA	Benefits
2.00 GPA	No admission fee or essay
2.00 GPA	Guaranteed full transfer of a minimum of 60 credits applied to the bachelor's degree, if admitted
2.00 GPA	Satisfaction of the general educatin/ distribution/core requirements at the receiving institution, with the receiving institution able to add no more than six additional credits/two courses, if admitted
2.50 GPA	Guaranteed admission, plus all of the above benefits
3.00 GPA	A 100% discount, plus all of the above benefits (must be used within one year after date of graduation)

A2B Linked Degrees

Beginning a college career at a community college can be a good choice. MassTransfer seeks to reward community college students who complete associate degrees at Massachusetts community colleges before they enroll in linked bachelor's programs at Massachusetts state universities or University of Massachusetts campuses. Not only does MassTransfer guarantee full transfer of a minimum of 60 credits but, depending on their final GPA and/or prerequisite coursework, students who complete A2B Linked Degrees (Associate to Bachelor's) may also receive guaranteed admission and tuition discounts.

A2B Mapped Degrees

Students who complete A2B Mapped Degrees are guaranteed that courses listed and taken as major requirements will be accepted as major requirements at teh receiving institution. Full-time students who follow A2B Mapped agreements and who earn a 3.00 GPA or higher also have the opportunity to participate in the Commonwealth Commitment. The Commonwealth Commitment (available in A2B Mapped majors only) further rewards students with a freeze on tuition & fees for all four years, and 10% end-of-semester rebates.

General Education Foundation

MassTransfer provides any student in the Massachusetts public higher education system who completes the General Education Foundation with the benefit of satisfying the general education/ distribution/core requirements at any other public high education institution (with the receiving institution able to add no more than six additional credits or two courses).

English Composition/Writing	6 credits
Behavioral and Social Sciences	9 credits
Humanities and/or Fine Arts	9 credits
Natural or Physical Science	7 credits
Mathematics/Quanitative Reasoning	3 credits
Total Credits	**34 credits**

Stipulations:

- Students enrolled in a specific major or degree program may be required to take additional courses if these courses are specifically required for the major or program and are required of native students.
- Completion of the General Education Foundation does not guarantee admission to the college or university

Non-Traditional Applicants

When students apply to Worcester State more than three years after high school graduation and have never attended a college or university, they do not need to meet the admission standards for first-year students. Instead, they must show they are capable of succeeding at Worcester State based upon their high school transcript grades. Standardized test scores and other factors may be used as part of the admission process. A current resume or personal statement outlining life experience, career goals and specific reasons for applying to Worcester State may be submitted with the application.

Post-Baccalaureate Pre-medical and Health Professions Program

This program is expected to meet the needs of students interested in medical, dental and veterinary school as well as those interested in pharmacy, physician's assistant, physical therapy, and optometry programs. Each student's history is evaluated and appropriate courses are advised based upon his/her specific needs. Students have access to Worcester State's Pre-medical and Health Professions Advisory Committee and, if necessary for a program, the recommendation letter process.

Students who complete thirty credits of the basic core sciences and/or other elective science courses at Worcester State University will receive a certification of completion of the program. Up to eight transfer credits will be allowed to contribute to the thirty credit total. Students will be required to maintain a 3.0 GPA to remain eligible for the program.

This program is designed for students who need the basic science curriculum either as new courses (career changers) or as repeat attempts (GPA enhancement). A GPA of 2.75 overall is required for admission to the program. Students wishing to take an advanced curriculum are advised to seek a second baccalaureate degree through the undergraduate school. The basic courses are offered throughout the academic year, primarily in the evening. Summer courses are also available. Interested students should contact the Office of Graduate and Continuing Education or the coordinator of the program at premed@worcester.edu. Additional information and application materials are available at http://www.worcester.edu/premed.

Below is a list of the basic core courses and available electives. Since health professions programs differ in their requirements, students should contact the Pre-Med Advisor prior to registration to make sure they are taking the correct courses.

The Basic Core

CH-120	General Chemistry I (including lab)	4
CH-121	General Chemistry II (including lab)	4
BI-140	Introduction to Organismal Biology (including lab)	4
BI-141	Intro to Cellular and Molecular Biology (including lab)	4
CH-201	Organic Chemistry I (lecture) (lecture)	3
CH-202	Organic Chemistry II (lecture) (lecture)	3
CH-203	Organic Chemistry Laboratory I (lab)	2
CH-204	Organic Chemistry Laboratory II (lab)	2
PY-221	General Physics I (including lab)	4
or PY-241	Physics I (Mechanics)	

PY-222	General Physics II (including lab)	4
or PY-242	Physics II (Electricity, Magnetism and Optics)	

Science and Math Elective Courses

MA-200	Calculus I	4
MA-201	Calculus II	4
MA-150	Statistics I	3
BI-203	Genetics	4
CH-410	Biochemistry I (including lab)	4
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-204	Microbiology	4

Additional Admission Criteria for Selective Majors

Nursing (BSN Track 1) and Occupational Studies (BSOS) are selective majors and have rigorous admission criteria and firm application deadlines which students must meet in order to be considered eligible to apply. Meeting minimum criteria and application deadlines does not guarantee a student's admission. First-year and transfer applications are processed through the Undergraduate Admissions Office. Current Worcester State students interested in changing their major should inquire directly through the host major department. Students who are competitive for admission to a selective major will have completed all appropriate pre-requisite courses and have an outstanding academic record. The following is used, along with other criteria, in considering applications to selective majors:

First-Time Applicants to Nursing (BSN Track 1)

First-Time Applicant Early Action Deadline	November 15
First-Time Applicant Application Deadline	January 15
First-Time Applicant Admission Criteria	Re-calculated High School GPA equal to 3.2 or greater (on a 4.0 weighted scale) and SAT scores equal to a combined evidence-based reading and writing (EBRW) and math (M) score of 11130 or greater or ACT Composite score equal to 23 or greater

Transfer Applicants to Nursing (BSN Track 1)

Transfer Application Deadline	January 15
Transfer Admission Criteria	Transfer applicants into Nursing (BSN Track 1) must complete prerequisite courses in English Composition I and II, Anatomy and Physiology I and II, and General Microbiology or Medical Microbiology before being considered eligible to apply (in progress coursework will not be considered). Students must have a minimum grade point average of a 2.75 or greater and grades of C or better in all pre-requisite courses. Meeting minimum standards does not guarantee admission and is based on space availability

The application and all required supporting documents including official final high school transcript(s) and official college transcript(s) must be received by the January 15 firm deadline for transfer applicants. All required courses for transfer must be completed by June 1 of the year applying for admission.

Transfer applicants with questions should contact the Admissions Transfer Center at 508-929-8018.

Current Worcester State students may not change their major to Nursing. Students are encouraged to meet with their academic advisor.

Public Health - Pre-Nursing Program

The Public Health - Pre-Nursing Program is a dual-degree based on a formal affiliation agreement that admits a limited number of students into an articulated program that begins with 83 credits at WSU in the Public Health/Pre-Nursing program and ends with the accelerated Bachelor of Nursing program at the Massachusetts College of Pharmacy and Health Sciences University ("MCPHS University") Worcester or Manchester, NH campus. At the completion of the appropriate 37 credits (of the 63 required) at MCPHS University, the student transfers those credits back to WSU, and earns a Bachelor of Science in Public Health. The student then completes the additional number of appropriate credits (26) at MCPHS University to earn the B.S. in Nursing. Students should see the advisor in the Health Sciences department assigned to the program. *Please see entrance requirements in this catalog.*

The Bachelor of Science in Public Health requires the following 83 credits at WSU followed by the 63 credits in Nursing which will be taken at the MCPHS University campus in either Worcester or Manchester, NH.

Pre-entrance Immunization Requirements

New first-year and transfer students must submit required health forms before registering for courses. For additional information refer to the Health Services (p. 85) section.

Second Baccalaureate Degree

Applicants who have already earned a bachelor's degree may apply for a second baccalaureate, excluding Early Childhood Education, Elementary Education, Occupational Studies (BSOS) and Undeclared. Requirements for this degree can be found in this catalog.

Special Admission

If standards for first-year, transfer or non-traditional students are not met, acceptance may still be possible based upon other signs of potential for academic success in a four-year college or university program. Possible signs of success include steadily improving high school grades, high school class ranking, special talents, and strong recommendations.

Special Non-Matriculated Students

Students classified as Senior Citizens, College Academic Program Sharing (CAPS) and Colleges of Worcester Consortium may enroll as Special Students. Others may enroll up to a maximum of 11 credit hours in day classes, on a space available basis at a time designated by the Registrar. Others who wish to enroll for more than 11 credit hours in state-supported courses must be admitted to Worcester State through the Admissions Office before taking courses. Non-matriculated students may register for evening classes through the Division of Graduate and Continuing Education during their registration periods.

Student Right-to-Know Act

The Student Right-to-Know Act of 1990 requires Worcester State to make available to prospective and enrolled students the graduation or persistence rates of selected groups of students. This information is available for review through either the Enrollment Management or the Undergraduate Admissions Offices.

The $30K Commitment

This program allows students to earn an Associate's Degree in a specific academic program from either Quinsigamond Community College or Mount Wachusett Community College and transfer to complete a Bachelor's Degree from Worcester State University. Students earn an Associate's and Bachelor's Degree in fours year at a total cost of $30,000. To qualify, students must be full-time, non-residential, in-state residents and college ready. For more information, visit http://www.worcester.edu/30k or email 30k@worcester.edu

STCC and GCC $30,000 Degree Agreements

This program allows students to earn an Associate's Degree in a specific academic program from Springfield Technical Community College, or Greenfield Community College and transfer to complete a bachelor's degree from Worcester State University. Students earn an Associate's and Bachelor's Degree in four years at a total cost of $30,000. To qualify, students must be full-time, non-residential, in-state and college ready.

Transfer Student Admission

Students who do not enroll as first-year students may attend a community college or other college or university and then transfer to Worcester State. To do so, one of the following requirements must be met:

1. 12-23 transferable college credits and a minimum 2.5 college GPA;
2. Up to 23 transferable college credits, a minimum 2.0 college GPA, and a combination of high school grades and SAT/ACT scores that meet the admission standards for first-year applicants; OR
3. 24 or more transferable college credits and a minimum 2.0 college GPA.

If college credits have been earned while enrolled in high school, the admission standards outlined above for first-year student applicants must be met.

Previously attended college/university:

Complete, official transcripts of all work taken at any other institution must be submitted as part of the application process, whether or not credit for such work is desired or expected. Students who fail to acknowledge attendance at any college or university in which they have been enrolled automatically waive the right to have that work considered for transfer credit. They may also be subject to denial of admission, loss of course credit, and/or suspension from Worcester State.

Transferring Credit from Other Institutions

Worcester State University determines transferability of credits from other colleges and universities based on best practices as outlined by the American Association of Collegiate Registrar's and Admission Officers (AACRAO), the American Council on Education (ACE), and the Council for Higher Education Accreditation (CHEA). Transfer and allocation of credit is determined based on the sending institution's regional accreditation, the comparability of the learning experience to WSU, and the applicability of the learning experience to the student's selected major/minor at WSU.

Stipulations that apply to transfer credit include:

1. College-level courses completed at colleges and universities accredited by the New England Association of Schools and Colleges, or similar regional associations, are acceptable for transfer to Worcester State University.
2. Coursework completed at non-regionally accredited institutions is considered on an individual basis, through a thorough examination of course content, syllabi, and/or learning objectives. Students may appeal the denial of transfer of credit from non-regionally accredited institutions to the Admissions Transfer Center.
3. Transferability and allocation of courses to Liberal Arts and Sciences Curriculum (LASC) and/or free electives must be approved by the Admissions Transfer Center and Academic Success Center, according to established LASC transfer policies (p. 47).
4. Substitutions of transfer credit in the requirements of the major/minor must be approved by the department in which the major/minor is housed.
5. The completion of the MassTransfer General Education Foundation at any Massachusetts community college, satisfies the WSU general core/LASC requirements, with the possible addition of two courses (6 hours) including a Capstone course and another LASC Content Area Course of the student's choice. Completion of the MassTransfer General Education Foundation is confirmed upon receipt of an official transcript stamped with "MTB Complete".

   The completion of a Bachelor's Degree from any regionally accredited institution of post-secondary education satisfies the WSU general core/LASC requirements. Completion of the Bachelor's Degree is confirmed upon receipt of an official transcript from a regionally accredited college or university with a degree completion graduation date.

Transfer students without the MassTransfer General Education Foundation or a Bachelor's Degree can transfer a maximum of 40 credits into LASC.

6. The maximum number of credits that can be transferred from a community or junior college to WSU is 72. The maximum number of credits that can be transferred from a four-year institution to WSU is 90. If a student has attended a combination of two-year and four-year institutions, a maximum of 90 credits, including no more than 72 credits from the two-year college(s), can be transferred.
7. A residency requirement at WSU exists, which includes completion of at least 30 of the last 40 credits of any degree program and completion of more than half of the major/minor courses while matriculated at WSU.
8. All transfer courses must be college-level. WSU does not accept remedial or developmental coursework in transfer.
9. Courses earned with grades of C- or better will be considered for transfer.
10. Life experience credit, internships, practica, colloquia, and cooperative education experiences at another college cannot be transferred to WSU. Credit for such experiences may be offered at WSU through a review with the American Council of Education (ACE) College Credit Recommendation Service.
11. The transfer credit evaluation process is conducted for new transfer students upon their deposit to WSU. Prior to depositing, new transfer students are provided an estimation of transferable credits in the acceptance letter.

Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy)

The WSU Veteran/Military VALOR Act Academic Credit Evaluation Policy is designed to:

- Assist veteran/military applicants through the admission processes, which may require different standards and practices from the traditional freshman/transfer admission procedures.
- Assist with specific challenges and concerns as well as provide additional support in the applicant's re-acclimation to civilian life.
- Provide additional support structures to maximize success in a degree program.
- Maximize benefits students may qualify for, based on their years of service.

The Worcester State University Veteran/Military VALOR Act Academic Credit Evaluation Policy allows academic credit to be awarded for students' previous military occupation, military training, coursework and experiences towards degrees and certificates. The awarding of academic credit shall be determined by the Worcester State Admission Office and Academic Success Center, as defined by WSU policy and national best practices. Eligible students shall receive accurate and complete academic counseling in regards to the policy when they are admitted.

Admissions may use multiple methods for evaluating military occupation, training, experience and coursework for academic credit, including the ACE Guide to the Evaluation of Educational Experiences in the Armed Services, CLEP, DANTES Subject Standardized Tests, and other methods. The appropriate method for evaluation is determined by Worcester State University, based on the type of military occupation, training, experience and coursework.

Once Admissions has posted credit to the student's academic record, the Academic Success Center will review the student's credit along with his/her program of study to determine the allocation of military credit in appropriate areas. All inquiries regarding the specific allocation of military credit should be directed to the Academic Success Center.

To Request Military Transcripts:

Military members and veterans (except the Air Force) can obtain military transcripts from the Joint Services Transcript system. Air Force Transcripts are available from The Air University.

To Request Military Medical Records:

To attend WSU, students must provide medical documentation. Military and veteran medical records are available from the U.S. Department of Veterans Affairs.

Admissions Contact:

Christopher Dooley, Assistant Director of Admissions
Administration Building, Office 241
cdooley@worcester.edu
508-929-8793

Academic Success Center Contacts:

Tammy Tebo, Assistant Dean of Academic Services
Administration Building, Office 130
TTebo1@worcester.edu
508-929-8933

Colleen Wheaton, Director of First-Year and Transfer Services
Administration Building, Office 130
CWheaton1@worcester.edu
508-929-8043

Academic Policies and Procedures

- Academic Achievement Awards Ceremony (p. 35)
- Academic Advising (p. 35)
- Academic Honesty (p. 35)
- Academic Reprieve Policy (p. 42)
- Academic Support Services (p. 42)
- Certificate (p. 43)
- Concentration (p. 43)
- Dean's List (p. 43)
- Electives (p. 43)
- General Requirements for the Baccalaureate Degree (p. 43)
- Good Student Policy (p. 44)
- Graduation Honors (p. 44)
- Honors Program (p. 44)
- Intent to Graduate (p. 44)
- International Programs (p. 44)
- Laptop and Technology Requirement (p. 46)
- Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery (p. 47)
- Matriculation (p. 69)
- Multicultural Affairs (p. 69)
- Program (p. 69)
- Registration and Course Information (p. 70)
- Standards of Progress (p. 72)
- Transcripts (p. 74)
- Undergraduate Grade Appeal Procedure (p. 74)
- Withdrawal from Worcester State University/ Leave of Absence (p. 75)

Academic Achievement Awards Ceremony

Conducted annually, the Academic Achievement Awards Ceremony gives special recognition to Worcester State University students who excel academically. Students so honored include those achieving the highest grade point average in individual disciplines, scholarship recipients, special academic award recipients, Dean's List honorees, and honor society inductees.

Academic Advising

Students are assigned a faculty member from their major department to serve as their advisor. Undeclared students have faculty/academic advisors assigned as well. Each student meets with his/her academic advisor during the regularly scheduled advising period each semester to review academic progress and select courses for the coming semester. Faculty advisors must approve all courses taken off campus, using appropriate forms available in the Office of the Registrar. All advisors have office hours, so the student should contact the advisor whenever information or an opinion on an academic matter is needed. Refer to the *Academic Advising Handbook* online (http://www.worcester.edu/handbook) or the Academic Success Center for further information.

Academic Honesty

Academic integrity is an essential component of a Worcester State University education. Education is both the acquisition of knowledge and the development of skills that lead to further intellectual development. Faculty are expected to follow strict principles of intellectual honesty in their own scholarship; students are held to the same standard. Only by doing their own work can students gain the knowledge, skills, confidence and self-worth that come from earned success; only by learning how to gather information, to integrate it and to communicate it effectively, to identify an idea and follow it to its logical conclusion can they develop the habits of mind characteristic of educated citizens. Taking shortcuts to higher or easier grades results in a Worcester State University experience that is intellectually bankrupt.

Academic integrity is important to the integrity of the Worcester State University community as a whole. If Worcester State University awards degrees to students who have not truly earned them, a reputation for dishonesty and incompetence will follow all graduates. Violators cheat their classmates out of deserved rewards and recognition. Academic dishonesty debases the institution and demeans the degree from that institution.

It is in the interest of students, faculty, and administrators to recognize the importance of academic integrity and to ensure that academic standards at Worcester State University remain strong. Only by maintaining high standards of

academic honesty can WSU protect the value of the educational process and the credibility of the institution and its graduates in the larger community.

What Constitutes Academic Dishonesty?

Academic dishonesty includes intentional violations of accepted standards of ethics and academic integrity as well as negligent violations of standards that the individual reasonably should have known and followed. The following is not an exhaustive list of violations but provides guidelines for evaluating common areas of concern, such as cheating, plagiarism and falsification of information. Violations of academic honesty include:

1. **Cheating,** including but not limited to:
    a. traditional cheating methods including copying on exams or assignments, letting other students copy one's own work, using crib sheets in quizzes and tests, glancing at other students' work, or giving answers to other students
    b. giving or receiving unauthorized assistance in exams, laboratory exercises or other academic assignments or attempting to do so, or using unauthorized materials or information sources on tests or assignments, including communication via cell phones or computers or use of materials stored on or accessed by computer or other digital media, or collaboration between or among more than one student on an assignment that is supposed to be done individually
    c. submitting someone else's work as one's own or allowing others to claim one's own work as theirs, including misrepresenting one's identity in an online course or allowing others to do so
    d. obtaining from any source an unauthorized copy of a test or assignment or portion of a test or assignment, and/or disseminating such material through any means, including cell phone or computer.

2. **Plagiarism,** including but not limited to:
    a. use of other people's ideas, words, research or artistic creations without giving credit
        i submitting any work, including homework, not done by the person who hands it in and whose name is on it
        ii submitting papers or other work purchased, copied or obtained free in whole or part from another source, including papers from the internet or from another person, including a friend or a relative
        iii using another person's unpublished ideas without permission, taking credit for another person's unpublished ideas, or taking sole credit for the product of joint efforts with another person.
    b. improper or inadequate citation of material from books, professional periodicals, magazines, websites, unpublished reports, personal communications, images, graphic materials or other citable sources
        i use of facts, data, or specific ideas without citing the source
        ii inaccurate or incomplete citation of sources
        iii quoting another's words without indicating it is a quotation
        iv using extensive quotations in place of one's own ideas, even when cited.

    Note: standards and forms for citation vary among disciplines and even among teachers. Students should ask their teachers about the expectations for any particular course or project.

3. **Misrepresentation** or falsification of information, including but not limited to:
    a. intentionally misrepresenting information to help make a point not supported by the work, including misquoting or taking ideas out of context
    b. falsifying the collection or interpretation of data in a research project
    c. citing sources not used
    d. falsifying one's qualifications, including academic background or other experience.

4. **Seeking credit for the same work** in more than one course, including but not limited to:

a. submitting the same paper or project, or significant parts of the same paper or project, to two or more different courses without getting permission from the professors who give the grades
b. using the same internship or fieldwork experience for two or more different courses without prior permission from the professors and internship supervisors involved.

5. **Other academic misconduct,** including but not limited to:
   a. forging, damaging or changing examinations, grades or other academic material or records including written and/or electronic material and records
   b. interfering with or damaging another student's work including homework, papers, laboratory assignments, artistic creations or research projects
   c. removing or damaging academic material or equipment, including electronic data, belonging to Worcester State University or any other member of the Worcester State University community
   d. deliberately making a false report of academic misconduct or covering up an incident of academic misconduct.

What Are Possible Sanctions?

If the instructor chooses to resolve this issue without referring it to the Academic Judicial Board, he or she has the power to give the student penalties such as a warning, a new assignment or test to replace the one which was not done honestly, or a failing grade on the work in question or in the class. Instructors do not have the power to assign community service or to expel the student: those penalties are in the power of the Academic Affairs Office/Academic Judicial Board only.

Typically, instructors will use these powers to deter the student from cheating in the future without branding the student as dishonest in any official record; they may warn the student that they will come forward with proof of this infraction if they hear that the student has repeated the offense. Instructors may choose to give warnings, require new work, and/or give failing grades on assignments will do so the first time a student turns in dishonest work; a failing grade in the class is usually reserved for repeat offenders and serious, deliberate offenses such as turning in work done by another student as one's own, using electronic means to get answers during in-class exams, or stealing exams or answer keys before a test.

The student has the right to appeal any instructor's decision to the Academic Judicial Board, which may uphold or change the instructor's decision.

The Judicial Board may assign penalties ranging from a warning to expulsion. Comprised of faculty, students, and administrators, its membership is designed to be aware of the differences between different kinds of academic dishonesty and of the strains and temptations that may lead to bad decisions.

Unless it is dealing with repeat offenders, the Judicial Board will probably respond to minor infractions with failing grades on the particular assignment in question or in the course. Deliberate dishonesty, such as use of answer keys or electronic aids during exams, theft of examination papers prior to the test, submission as one's own of work done by another student or found or purchased online, etc. should be grounds for a failing grade in the course, with community service hours in addition as a possibility.

Repeated infractions would put offenders at risk of expulsion, as would extremely serious offenses, like stealing an examination and sharing it with other students before the test or having another student take a test in one's place in an online course.

Students at risk of expulsion will be given a written warning, which they will be required to sign and return within 10 working days.

Acts that are not only dishonest, but criminal, like changing a grade through illegal access to Worcester State University computers, can be punished by expulsion without prior warning.

Undergraduate Policies and Procedures for Handling Cases of Academic Dishonesty

1. **Students' Rights**
   a. Students will have the presumption of innocence until proven guilty.
   b. Students will continue their student status unless and until sanctions are imposed at the conclusion of judicial sanctions which would limit or remove this status.
   c. Students are allowed to have an advisor of their choosing at hearings of the Academic Judicial Board. The advisor may counsel the student during the hearing but may not address the Board.
   d. Students are allowed to view evidence against them.
   e. Hearings at the Academic Judicial Board will proceed even if the student does not appear. However, the student's absence cannot be the reason a student is found guilty.
   f. Students will be notified via certified mail if a report is being made concerning them in the Central File.
   g. Students may review their records in the Central File within 45 days of the day Worcester State University receives a request for access, as stated in FERPA.
   h. Students may ask Worcester State University to amend a record that they believe is inaccurate or misleading. They should write to the Provost/Vice President for Academic Affairs, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
   Students should submit to the Provost/Vice President for Academic Affairs written requests that identify that they wish to view their record(s) in the Central File. The Provost/Vice President for Academic Affairs will make arrangements for access and notify the student of the time and place where the records may be inspected.
   If the Provost/Vice President for Academic Affairs decides not to amend the record as requested by the student, Worcester State University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

2. **Initiation**
   In cases involving the violation of academic integrity, students and faculty are strongly encouraged to resolve matters without resorting to official judicial proceedings. If the faculty member and student are unable to resolve the issue themselves, the chair of the department in which the course was taken should be asked to mediate. If resolution is not possible at this level, the case will go to the Academic Judicial Board (refer to 3 below).
   Faculty members and appropriate administrators are strongly urged to report any violations of academic integrity to the Academic Central File.

3. **Academic Central File**
   An Academic Central File of students proven to have violated Worcester State University's Academic Honesty Policy will be kept in the Office of Academic Affairs. Only the Provost/Vice President for Academic Affairs or his/her designee will have direct access to the Central File. A file will only be created for a student upon a case's final resolution with a faculty member, with a department chair, or with the Academic Judicial Board.
   Faculty members have the option of reporting students to the Academic Central File. Reports, which are statements of resolutions of cases and not allegations, that are sent to the Academic Central File must be supported with proof of some kind. For example, the instructor may submit a copy of a plagiarized paper along with a printout of the same paper from the Internet. A faculty member who reports a student for the kind of cheating that can't be proved without a camera (copying from the person in the next chair, sneaking a peak at the book in a closed-book test, asking a classmate for an answer) must provide the reasons for the accusation in writing. Students who are added to the Academic Central File will be informed of the fact in writing. Reporting a student is not necessarily linked to a disciplinary action; the faculty member still has discretion over whether to take the case to a judicial hearing. In special cases, when the Provost/Vice President for Academic Affairs notices that a student has two or more significant violations in the Central File, he or

she can refer the case to the Academic Judicial Board, which may then initiate disciplinary proceedings against this student.
Faculty members who provide evidence that a student in their course has violated the Academic Honesty Policy may meet with the Provost/Vice President of Academic Affairs or his/her designee to find out if a student has a file, and if so, how many times he/she has been reported to the Academic Central File. Relevant information limited to the student's name and number of times he/she has been reported to the Central File may be disclosed to a faculty member to assist in making decisions regarding cases of academic honesty. The procedures by which students access these files will be the same as those for accessing their academic records. The Academic Judicial Board, in the course of deciding a case of academic dishonesty, may access a student's file. A student's files are purged according to current FERPA rules. Students' files are purged upon graduation, withdrawal, dismissal or transfer from Worcester State University. When a student's file(s) have been purged, the student will be notified in writing by certified mail.

4. **Academic Judicial Board**
   At any point beyond the departmental level, either the student or the faculty member may elect to take the issue to the Academic Judicial Board following the procedures outlined below.
   a. A student may request an Academic Judicial Board hearing
      i because she or he has been unable to resolve an accusation of academic dishonesty with a faculty member or the chair of that faculty member's department
      ii in response to a notice that an Academic Central File posting is to be made.
      The student makes this request, in writing, to the Chairperson of the Academic Judicial Board, in care of the Office of Academic Affairs.

   b. Any member of the Worcester State University community may report any student to the Academic Judicial Board for violations of the Academic Honesty Policy. Reports shall be prepared in writing, directed to the Chairperson of the Academic Judicial Board (in care of the Office of Academic Affairs), and submitted as soon as possible after the incident takes place, preferably within 30 days. The Chairperson has the authority to extend this timeframe on a case-to-case basis.

   c. The Chairperson will determine if the complaint lacks merit and/or if it can be disposed of by mutual consent of the parties involved on a basis acceptable to the Chairperson. Such disposition shall be final, and there shall be no subsequent proceedings. If the case cannot be disposed of by mutual consent, the matter will proceed to the Academic Judicial Board.

   d. All charges shall be presented to the accused student in writing via certified mail with return receipt requested; the same letter will also be sent by first class mail to the student's current address as registered with Worcester State University. The hearing shall be scheduled not less than seven or more than fifteen calendar days after the student has been notified. All parties shall receive at least seven days advance written notice of the date, time and place of the hearing. Maximum time limits for scheduling of hearings may be extended at the discretion of the Chairperson.

   e. The Chairperson will schedule an Academic Judicial Board hearing.
      i The hearing will be conducted by the Chairperson of the Academic Judicial Board, chosen by the board members.
      ii The Academic Judicial Board is comprised of two faculty members, one administrator and two students. The faculty members are appointed by the MSCA. The administrative member is appointed by the Associate Vice President for Academic Affairs, in consultation with the Provost/Vice President for Academic Affairs. The student members are appointed by the Student Government.
      iii A quorum of three members must be present to convene a hearing.

   f. Hearings shall be conducted by the Academic Judicial Board according to the following guidelines:

i All procedural questions are subject to the final decision of the Chairperson of the Academic Judicial Board present at the hearing.

ii Hearings shall be conducted in private.

iii In hearings involving more than one accused student, the Chairperson of the Academic Judicial Board, at his or her discretion, may permit the hearings concerning each student to be conducted separately.

iv The complainant and the accused each have the right to be assisted by an advisor from the Worcester State University community. Advisors may counsel their respective party during the hearings, as permitted by the Academic Judicial Board. Advisors are not permitted to participate directly in the hearing.

v The complainant, the accused and the Academic Judicial Board shall have the privilege of presenting witnesses to any violations of academic integrity. The accused and the complainant shall have the opportunity to cross-examine witnesses presented by the other. Members of the Academic Judicial Board shall have the right to question any witnesses.

vi All hearings are closed to friends and relatives of the accused unless they were actual witnesses to the violation of academic integrity. Witnesses are excluded from the hearing except when called to testify.

vii Pertinent records, exhibits and written statements may be accepted for consideration by the Academic Judicial Board at the discretion of the chairperson.

viii After the hearing, the Academic Judicial Board shall determine by majority vote whether the student has violated Worcester State University's standards of academic honesty.

ix The Academic Judicial Board's determination shall be made on the basis of whether it is more likely than not that the accused student violated the rules of academic honesty in the manner charged against him or her.

g. A written record of Academic Judicial Board proceedings shall be made by the Board or its secretary. This record shall be the property of Worcester State University and will be housed in the Office of Academic Affairs. The record will state the final decision of the Board, a statement of the Board's findings of fact, its determination of the provision(s) of the Academic Honesty Policy, if any, that the student violated and the sanction(s), if any, imposed. The record may also include a summation of witness testimony. A copy of the final decision shall be given to the complainant and the accused.

h. Students may not be found to have violated the Academic Honesty Code solely because they fail to appear before a judicial body for a scheduled hearing. In all cases, the materials and information in support of the charges shall be presented and considered, as the hearing will be held in the absence of the student, should he/she fail to attend.

i. In the absence of a functioning Academic Judicial Board or Academic Board of Appeals, such as during exams or during the summer and semester breaks, disciplinary hearings (under this Section 3, and the following Section 4) will be the responsibility of the Associate Vice President for Academic Affairs or his/her designee. When he/she deems it appropriate, a hearing may be postponed until the beginning of the new semester.

j. Possible sanctions that the Academic Judicial Board could impose would depend upon the severity of the offense; however, the Board could choose to uphold the original faculty decision or impose another punishment, which might include failing the course, expulsion from the major or program, or expulsion from Worcester State University.

5. **Academic Judicial Board of Appeals**

The purpose of the Academic Judicial Board of Appeals is to conduct procedural reviews of cases. It is not intended as an evidentiary panel. It is not the job of the Academic Judicial Board of Appeals to hear new evidence.

a. A decision reached by the Academic Judicial Board may be appealed by the accused student(s) or the complainant to the Academic Judicial Board of Appeals within five working days of the date of the decision letter. Such appeals shall be in writing and shall be delivered to the Associate Vice President for Academic Affairs or his/her designee.

b. The Academic Judicial Board of Appeals will consist of one administrator, two students and two faculty members and will be chosen in the same manner as the members of the Academic Judicial Board (see 4.e.ii. above). The administrator in this case, will be the Associate Vice President for Academic Affairs or his/her designee.

c. In cases where the student files an appeal, the complainant, and, in cases that were decided by Academic Judicial Board hearing, the Chairperson of that Board, shall be notified. In cases where the appeal is not initiated by the student, the student shall be notified.

d. An appeal is not a new hearing but is a review of the summation/record of the initial hearing and supporting documents for one or more of the following purposes:
   i to determine whether the original hearing was conducted fairly in light of the charges and evidence presented, and in conformity with prescribed procedures
   ii to determine whether the finding of responsibility or no responsibility is supported by the weight of the evidence
   iii to determine whether the sanctions imposed were inappropriate.

e. When the appellant wishes to introduce new evidence, sufficient to alter a decision, or other relevant facts not brought out in the original hearing, because the person appealing did not know such evidence and/or facts at the time of the original hearing, the Chairperson of the Academic Judicial Board of Appeal (the Associate Vice President for Academic Affairs) will decide whether to instruct the Academic Judicial Board to convene a new hearing of the case. If a case is returned to the Academic Judicial Board for consideration of new evidence, all parties shall have equal opportunities to submit new material.

f. Upon completion of the appellate hearing, the Academic Judicial Board of Appeals shall promptly notify the accused student, the complainant and the chair of the Academic Judicial Board of the outcome of the appeal. Said decision(s) shall take one of the following forms:
   Appeal Upheld: the appellant's request for relief has been honored. In the case of an upheld appeal, the new findings/sanctions shall be stated;
   or
   Appeal Denied: the appellant's request for relief is denied and the finding(s) and/or sanction(s) stand.

g. In extraordinary circumstances, the Associate Vice President for Academic Affairs or his/her designee may waive the deadline for filing an appeal. The decision to waive or not to waive a deadline shall be final and shall not be subject to any appeal.

h. No disciplinary sanction shall be imposed while an appeal is pending unless the Associate Vice President for Academic Affairs determines that such action would be in the best interest of the Worcester State University community.

6. **Administrative Failing Grade**
   In cases where the sanction for academic dishonesty is determined to be a failing grade for the course, the Registrar will be informed immediately. The Registrar will record an administrative failure. Such a grade is not subject to withdrawal or appeal. A student who receives a failing grade for a course due to a violation of academic honesty cannot eradicate that failure through the normal grade appeal process or by withdrawing from the course.

Academic Reprieve Policy

The Academic Reprieve Policy applies to former Worcester State University students returning to complete baccalaureate degree programs a minimum of three academic years after their last completed semester at Worcester State University. This policy is designed to facilitate program completion for students whose previous academic records were so poor as to put them in jeopardy of academic probation or dismissal immediately upon readmission. A student may exercise this academic reprieve option only once.

A student meeting criteria for eligibility must file a petition form, available in the Office of the Registrar, requesting reprieve of eligible course work at Worcester State University, either at the time of readmission or before the close of the first semester of re-enrollment. A maximum of 60 credits may be applied toward graduation from the student's previous enrollment at Worcester State University. In order to be applied, those courses must have received a passing grade. Credit for courses in the student's major is contingent upon approval by the Department Chair. None of the grades associated with courses given credit under the academic reprieve policy will be calculated in the student's GPA; however, all course work will be recorded on the transcript. A student selecting the reprieve option will be required to meet degree requirements of the catalog in effect on the date of the student's application for readmission. Those electing the reprieve option may qualify for honors at graduation upon the completion of a minimum of 60 graded credits. All approved academic reprieve students should check with the Financial Aid Office to see whether their reprieve will be recognized for financial aid purposes.

Academic Support Services

Academic Success Center

The Academic Success Center is located in the Administration Building, Room 130. The work of this office focuses on:

- First semester advising (for new first-year students and transfer students)
- Walk-in advising for all students
- Testing services including Accuplacer and CLEP
- Group tutoring in specific courses
- Registration assistance for students who are on academic probation
- Leave of Absences and withdrawals from the University

Tutoring Services

The aim of Tutoring Services is to increase student academic effectiveness. The Academic Success Center provides group in a variety of courses. If the Academic Success Center does not provide tutoring in a specific course, students are encouraged to attend Academic Workshops, as this is the time when students are learning how to adjust to college-level study. The focus, therefore, is on learning how to learn rather than on content area tutoring. Accordingly, Academic Workshops will assist students in improving their study skills, test-taking skills, and time management skills. Students who think they may need academic assistance in order to achieve their educational objectives should visit the Academic Success Center as soon as possible to maximize the benefit of these services.

Math Center

The Worcester State University Math Center provides peer tutoring for all courses with mathematical content. These courses include those offered by the Business and Economics, Computer Science, Chemistry, Nursing, Psychology, and Physics departments. Tutoring is also available for math courses starting from MA-098 / MA-099 Developmental Math through MA-201 Calculus 2, as well as, Accuplacer Preparation for students taking or retaking the placement exam. The Math Center is a resource free of charge to all students and is located in Sullivan 140.

Writing Center

Located in Sullivan 306, the Writing Center is a resource available free of charge to all members of the Worcester State University community. The Writing Center is staffed by graduate assistants and peer tutors who represent a variety of majors and interests. Sessions can be arranged on an appointment or drop-in basis, and the staff of the Writing Center can address basic and advanced writing needs. The Writing Center also hosts Writenet

(http://www.worcester.edu/owl), an online writing center that offers instruction and support over the World Wide Web.

Certificate

A certificate is a course of study leading to a professional credential or certification. The number of credits or courses required is determined by the program offering the certificate.

Concentration

A concentration is a specialized track within a major or an approved interdisciplinary track of study. The number of credits and courses of study required to earn a concentration within a major is determined by the major department or the program administering committee.

An interdisciplinary concentration may be completed by earning between 12 and 17 credits in a specified course of study as determined by the program administering committee.

Dean's List

Full-time Students: Following the completion of each semester, the names of all students enrolled for a minimum of 12 graded credits excluding courses taken on a pass/fail basis and whose GPA for that semester is 3.5 or better will appear on the Dean's List. The distinction will be noted on the student's transcript.

Part-time Students: Following the completion of each semester, the same criteria for honors for full-time students will be applied to part-time day and evening students. Students must have an academic load of a minimum of six credit hours excluding courses taken on a pass/fail basis. The names of students whose GPA for that semester is 3.5 or better will appear on the Dean's List. The distinction will be noted on the student's transcript.

The Dean's List is posted for matriculated undergraduate students only. Any student receiving an incomplete grade in a semester is ineligible for academic honors in that semester.

Electives

Having met the LASC requirements and those of the major (and minor, where applicable), a student may elect other courses without restriction to complete the 120 semester hours of credit necessary for graduation. The purpose of elective courses is to encourage exploration in diverse fields of knowledge. Therefore, students are urged to take advantage of the opportunity to broaden and deepen their intellectual development.

General Requirements for the Baccalaureate Degree

Candidates for a baccalaureate degree must complete 120 semester-hour credits with a minimum overall GPA of 2.0 and a minimum 2.0 GPA or higher in the departmental and ancillary courses in their major. To receive a baccalaureate degree from Worcester State University, a student must:

- complete 30 of the last 40 credits at Worcester State University
- earn a majority of credits in the major at Worcester State University
- earn a majority of credits in the minor (if elected) at Worcester State University.

Students completing their degrees within six years must meet the degree requirements of the catalog under which they enter Worcester State University. After six years, students are subject to the degree requirements of the catalog in effect for their year of graduation.

Second Baccalaureate Degree: A student who holds a bachelor's degree from Worcester State University or another four-year institution of higher education accredited by regional accrediting agencies may be awarded a second bachelor's degree by completing a minimum of 30 additional semester hours of prescribed work at Worcester State University after matriculation into the second degree program. Twelve semester hours of the 30 must be in upper-level work in the student's major, and the student must meet all requirements for that major. In addition, in order to be granted a second degree, the student must meet all current catalog requirements for a baccalaureate degree at Worcester State University, as follows:

- All courses from the former institution which the Office of Admissions deems usable towards fulfillment of requirements currently existing at Worcester State University will be transferred to the student's second baccalaureate program.
- All courses transferred into the student's major for the second degree are subject to the approval of the Department Chair.
- As many credits from the former institution as are deemed appropriate by the Office of Admissions will be transferred to the student's second degree program as elective credits (up to and not to exceed 90 credits).

Post-baccalaureate students who seek a second major but do not seek a second baccalaureate degree at Worcester State University will receive a letter from the Registrar certifying completion of the second major upon completion of all prerequisites to the major and all requirements of the major. After matriculation into either post-baccalaureate program, no additional transfer credits will be allocated as graduation credit.

Good Student Policy

Some private organizations, such as insurance companies, offer discounts to college students who are considered "good students". Worcester State University certifies students as "good students" for this purpose using a specific set of academic criteria. To qualify for certification of Good Student Discount eligibility, Worcester State University students shall meet one or more of the following criteria:

- The student has a grade point average of "B" or higher for the most recent term.
- The student has a cumulative grade point average of "B" or higher.
- The student is on the Dean's List.

Graduation Honors

According to the degree of academic excellence, graduates may be awarded the distinctions of cum laude, magna cum laude, or summa cum laude. Students graduating with honors must attain the following cumulative GPA based on all credits earned at Worcester State University (minimum 48 credit hours for transfer and second degree students).

Cum Laude	3.5-3.69
Magna Cum Laude	3.7-3.89
Summa Cum Laude	3.9-4.00

Honors Program

The mission of the Commonwealth Honors Program at Worcester State University is to give high-performing and motivated students opportunities to recognize and realize their academic potential and future goals. The program promotes scholarly excellence among both students and faculty through its curriculum and co-curricular programming. It builds strong community ties to sustain the intellectual and social development of its participants and to enhance the life of the University. The program is part of the Massachusetts Commonwealth Honors Program and a member of the National Collegiate Honors Council. Students are encouraged to contact the director for information regarding entrance into the program.

Program requirements include 21 credits in honors courses, which may also count toward major, minor, or LASC requirements, and attendance at co-curricular events. Students who complete an independent research project and present it in a public forum earn the additional Commonwealth Honors Scholar designation.

Intent to Graduate

The degree and diploma will be granted within 60 days of the final day of examinations for the semester in which degree requirements have been met providing that students have adhered to the following deadlines for filing an Intent to Graduate Form:

Date of Completion	Deadline
December completion:	Last Friday of October
May completion:	Last Friday of December
August completion:	Last Friday of May

International Programs

International Students

Worcester State University is authorized to host both F-1 and J-1 international students, scholars, and professors. The Office serves the Worcester State University international community in a variety of

ways, including pre-attendance advising on visa issues, on-campus orientation and comprehensive support services throughout the duration of students' academic programs at Worcester State University.

All international students must have a valid student visa to travel to the U.S. and are required to pursue a full course of study at all times. Under the policy of the US Department of Homeland Security, all international students must report to the Office of International Programs after their initial entry into the U.S. and at the start of each semester thereafter. Additional information on international applicants can be found on the Admissions page.

Education Abroad

Worcester State University strongly encourages students to participate in some form of study abroad experience during their time as an undergraduate. To participate, students must have a minimum GPA of 2.7 and sophomore standing. To facilitate such opportunities, Worcester State University offers an array of domestic and international exchange opportunities. Worcester State University students can earn academic credit on both short and long-term programs throughout the year. All major courses must be approved with the assistance of academic departments in advance of travel for credits to transfer back to Worcester State University. LASC requirements must be approved by the LASC coordinator. The grades earned for study abroad will be posted as letter grades which will not factor into the student's GPA. Interested students are strongly advised to communicate their intention to study abroad early in their academic career.

International Exchange Opportunities

Worcester State University has entered into multiple exchange agreements with institutions in a variety of locales including England, China, Thailand, South Korea, Portugal, Ireland and the Czech Republic. Courses are offered in English and students have the opportunity to learn the native language as well. Per the conditions of the exchange agreements, Worcester State University students pay Worcester State University tuition and fees to Worcester State University and accommodation fees to the host institution.

The National Student Exchange

The National Student Exchange (NSE) offers students the opportunity to participate in exchange opportunities with nearly 200 institutions in the U.S., Canada, and the U.S. territories enabling participating students to attend another NSE school at either the home or host school in-state tuition rate. Reciprocal tuition exchanges are available in 48 states including Alaska and Hawaii and in the three U.S. territories of Guam, Puerto Rico and the U.S. Virgin Islands. NSE offers students the opportunity to live and learn in a different academic and geographical setting for up to one academic year.

Study Abroad

Worcester State University is affiliated with a number of organizations which provide summer, semester, and academic year program options for students throughout the world. These programs are committed to developing international dimensions as an integral part of the academic curriculum and they strive for a high level of academic excellence. To qualify for participation, students must have a minimum class standing of a Sophomore. All courses must be approved by the appropriate academic departments and the LASC coordinator prior to participation in the program for credits to transfer back to Worcester State University.

Short-Term Programs

Worcester State University offers a variety of short-term, one to four weeks, programs each academic year. Popular destinations include: Costa Rica, Nicaragua, the U.K., Spain, and the Dominican Republic. These programs are offered over January Break, Spring Break, and during the summer semesters. These faculty-led credit-bearing overseas learning experiences are focused and affordable and are designed to provide greater accessibility to students and to cover a breadth of academic interests and geographical destinations. All students are eligible for participation at the discretion of the faculty leader.

Intensive English Language Institute (IELI)

The Intensive English Language Institute offers students the opportunity to attain English language fluency and U.S. cultural competencies to succeed in college or university studies. IELI offers both full-

time and part-time programs providing top quality English as a Second Language (ESL) instruction to international students and working professionals. Courses are not for credit.

In the Intensive ESL Program, students study academic English up to 20 hours per week to rapidly improve their fluency and competency. Classes meet in the Fall and Spring for 14 weeks and in the summer for 5 or 10 week sessions. Core courses focus on reading, writing, listening, speaking, pronunciation, grammar and preparation for the iBT TOEFL examination. The full-time program meets requirements for an F-1 student visa.

ESL classes in the Community Program meet 4 hours per week. Students improve their English for work, further education, or general fluency.

Placement tests are required for all students to determine the best level for IELI courses.

Bridge to University Program

IELI offers a Bridge to University Program, a postsecondary program of study that combines ESL courses with WSU credit courses from Liberal Arts and Sciences (LASC) curriculum. Successful completion of this program will enable students to meet prerequisite requirements of full admission to a degree program.

Students are required to maintain full-time status (as defined by federal regulations) while engaging in a combination of remedial and non-remedial coursework preparing them for matriculation to WSU. The program is offered in the fall and spring semesters.

Laptop and Technology Requirement

Entering full- and part-time first-year and transfer students are required to own a laptop computer when they arrive on campus. For more information please visit Laptop Purchase Program.

Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery

An education in the liberal arts and sciences enables students to understand their world, and it equips them to analyze, appreciate, and affect that world. With these aims in mind, the faculty at Worcester State University have designed the university's Liberal Arts and Sciences Curriculum (LASC) to ensure breadth both in the range of subjects that students will encounter and in the range of approaches to that material. In addition, the Liberal Arts and Sciences Curriculum emphasizes the fundamental abilities and attitudes that make it possible to benefit fully from a liberal education. While the specialization provided by a student's major field of study is essential to a college education, the breadth and integration provided by the Liberal Arts and Sciences Curriculum supply an invaluable context for understanding the wider world.

Given the crucial importance of languages other than English in today's global society, the University strongly encourages the study of world languages, through the majors and minors, and also through combining the requirements in Global Perspectives and Thought, Language, and Culture. Students may also choose to study languages through their elective courses.

The Liberal Arts and Sciences Curriculum is aimed at achieving the following student learning outcomes. Having completed courses in the Liberal Arts and Sciences Curriculum, students will:

- Demonstrate effective oral and written communication.
- Employ quantitative and qualitative reasoning.
- Apply skills in critical thinking.
- Apply skills in information literacy.
- Display an appreciation for the interrelations among global and cross-cultural communities.
- Develop a critical understanding of the U.S. experience.
- Understand the roles of science and technology in the modern world.
- Demonstrate and value personal creative expression.
- Understand how scholars in various disciplines approach problems and construct knowledge.
- Display socially responsible behavior and act as socially responsible agents in the world.
- Make connections across courses and disciplines.
- Develop as healthy individuals – physically, emotionally, socially, ethically, and intellectually.

Core Course Requirements

Core courses may not double with content area course requirements.

- Writing (WR1, WR2) (p. 66)
- Constitutions (CON) (p. 49)
- First-Year Seminar (FYS) (p. 53)
- Capstone Experience (CAP) (p. 48)

Content Area Course Requirements

Students will complete courses in eight content areas. Courses in the Liberal Arts and Sciences Curriculum may not be used to meet the primary requirements of a first major, but may be used to satisfy the requirements of a second major or a minor.

- Creative Arts (CA) (p. 50)
- Human Behavior and Social Processes (HBS) (p. 56)
- Individual and Community Well-being (ICW) (p. 58)
- Global Perspectives (GP) (p. 54)
- Natural Systems and Processes (NSP) (p. 59),
  - Non-approved LASC lab (NLL) courses do not meet the requirement for a LASC NSP course
- Natural Systems and Processes (LAB) (p. 59),
  - Non-approved LASC lab (NLL) courses do not meet the requirement for a LASC LAB course
- Quantitative Reasoning (QR) (p. 61)
- Thought, Language, and Culture (TLC) (p. 63)
- The United States and Its Role in the World (USW) (p. 61)

Across the Curriculum Course Requirements

Across the Curriculum courses may be met with Content Area courses, courses in the major and general elective courses. A single course may fulfill more than one Across the Curriculum area. First-year seminars may be approved for QLAC and DAC. Capstone seminars may be approved for DAC, WAC, and/or QLAC.

- Writing Across the Curriculum (WAC) (p. 66)
- Diversity Across the Curriculum (DAC) (p. 51)
- Quantitative Literacy Across the Curriculum (QLAC) (p. 60)

LASC Transfer Policies

- Mathematics courses will be transferred as QR for maximum of six credits in LASC.
- Science courses in Physics, Chemistry, Biology, and GeoSciences transfer as NSP for a maximum of seven credits. A lab science course transfers as a NSP lab course.
- Psychology, Economics, Political Science, Anthropology, Cultural Geography, Sociology, and Education courses transfer as HBS for a maximum of three credits.
- Philosophy, Literature, Religion, Communication (theory), and Language courses transfer as TLC for a maximum of three credits.
- Art, Communication (applied), Music, and Theatre courses transfer as CA for a maximum of three credits.
- Health and Nutrition courses transfer as ICW for a maximum of three credits.
- History courses transfer as USW, GP or TLC for a maximum of six credits.
- All other transfer courses will be reviewed individually by the LASC Program Chair, in consultation with appropriate academic departments, the LASC Advisory Board, or the Associate Vice President for Academic Affairs.
- Courses transfer as Across the Curriculum courses in consultation with the LASC Program Chair, Across the Curriculum courses that have an equivalency will not automatically transfer as such.

Other LASC Policies

- Students may apply one course from the major discipline toward a LASC requirement as long as:
  - The course is not also used to meet requirements for the major
  - The course has been approved for the appropriate LASC category

Capstone Experience (variable credit) [CAP]

Capstone seminars are offered to students in their junior or senior year through their major field of study for varying credit or through a three-credit course offered within the Liberal Arts and Sciences Curriculum. Capstone seminars completed within a student's major field of study will count toward major requirements. Enrollment in capstone seminars is limited to 20 students.

Capstone seminars:

- Provide students the opportunity to demonstrate mastery of a subject area or skill.
- Require synthesis and integration of prior knowledge and abilities.
- Are designed to facilitate the transition from WSU to the world of work, professional development and/or graduate studies.
- May include research, leadership and internship opportunities, artistic projects, the production of a portfolio of student work, and/or other culminating learning experiences.

AR-455	Thesis Capstone	3
BA-490	Business Strategy and Policy	3
BI-404	Biology Seminar	2
BT-410	Biotechnology Seminar	1-4
CD-410	Professional Guidelines and Skills	3
CH-475	Chemistry Seminar	2
CJ-400	Criminal Justice Capstone	3
CS-448	Software Development Capstone	3
CS-483	Big Data Analytics Capstone	3
EC-490	Capstone in Economics	3
ED-319	Advanced Field Experience in Early Childhood Education	3

ED-405	Classroom Management and Child Guidance Techniques	3
ED-424	Sem: Teaching Practicum	3
ED-425	Sem: Applying Ed Principles	3
EN-426	Senior Seminar	3
GE-400	Geography Seminar	3
GS-400	Geography Seminar	3
HC-425	Research Seminar	3
HC-450	Practicum: Community Health	3-6
HE-440	Practicum in Health	3
HI-460	Senior Research Seminar in History	3
HI-465	American Antiquarian Society Seminar	3
HI-470	Senior Thesis in History	3
MA-470	Capstone Experience	3
NU-470	Nursing: Capstone	7
NU-472	Community Nursing Capstone Course	6
OT-426	Organizational and Professional Issues I	3
PB-400	Capstone in Psychobiology	2
PS-410	Capstone: Seminar in Developmental Psychology	3
PS-450	Capstone: Contemporary Issues in Psychology	3
PS-492	Capstone: Seminar in Mental Health	3
SO-499	Sociology Capstone	4
SP-475	Internship: Spanish	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
VP-400	Arts Capstone/Senior Thesis	3
WO/PS-492	Capstone Seminar in Mental Health	3

Constitutions (3 credits) [CON]

Students must complete one course that teaches the constitutions of the United States and the Commonwealth. Courses which meet this requirement will:

- Require students to study the Constitutions of the Commonwealth of Massachusetts and of the United States.
- Consider the historical context, addressing
  - antecedents in English law
  - idea of written fundamental law
  - context of colonial history
  - failed predecessors (the 1778 constitutions and the Articles of Confederation)
  - mechanism of drafting, ratification and amendment
  - influence of the Massachusetts Constitution on the U.S. Constitution.
- Consider political thought in contemporary society, addressing
  - how each constitution shapes modern life
  - differing interpretations, including by the courts
  - current issues related to each constitution
  - basic national, state and/or local political processes, and the rights and obligations of citizenship.

GL/HI-112	US History II	3
HI-111	US History I	3
HI-112	US History II	3
HI-218	US Constitutional History I	3
HI-219	US Constitutional History II	3
HI-320	Citizen Nation	3
HI-380	American Foreign Policy Since the Cold War	3
PH-151	Race, Gender, and the Law	3
PH-231	Philosophy of Law	3
PO-110	American Government	3
PO-150	Foundations of Legal Studies	3
PO-217	The Legislative Process	3
PO-218	US Constitutional History I	3
PO-219	US Constitutional History II	3
PO-320	Citizen Nation	3
PO-380	American Foreign Policy Since the Cold War	3
WO/HI-111	US History I	3
WO/HI-112	US History II	3
WO/HI-320	Citizen Nation	3
WO/PO-320	Citizen Nation	3

Creative Arts

(3 credits) [CA]

Students must complete one course.

Courses in this area:

- Encourage recognition that artistic expression varies from one society and culture to another.
- Explore different traditions, styles and historical periods in the arts.
- Promote freedom of expression and tolerance of divergent viewpoints.
- Consider the importance of aesthetics and instill an awareness of how the arts improve the quality of life.
- Enable each student to cultivate his or her creative potential.
- Teach the terminology, techniques and skills that comprise the arts in order to provide the framework for informed creativity.

AR-100	Cross Media Studio	3
AR-112	World Art Survey I	3
AR-113	World Art Survey II	3
AR-117	Visual Design: 2 Dimensions	3
AR-122	Visual Design: 3-DIMENSIONS	3
AR-123	Design Fundamentals	3
AR-130	Painting I	3
AR-140	Drawing Fundamentals	3
AR-150	Life Studio I	3
AR-160	Sculpture I	3
AR-165	Creating Cultural Forms	3
AR-200	History of American Art	3
AR-210	Drawing and Painting Studio	3
AR-220	Foundations of Modern Art	3
AR-225	Art Since Mid-20th Century	3
AR-230	Printmaking	3
AR-235	3D Sculpture Studio	3
AR-240	Watercolor	3
AR-260	Visual Arts in the Schools	3
AR-270	Driftwood to Dumpsters	3
AR-275	Gallery and Museum Studies	3
AR-285	History of Photography	3
CM-150	Photography I	3
CM-151	Introduction to Digital Photography	3
CM-152	Ecotourism & Photography in Costa Rica	3
CM-241	Understanding Movies	3
CM-242	Understanding Video Games	3
CM-250	Music of the Cinema:Spectacle, Splendor, and Spielberg	3
CM-259	Television Production	3
CM-260	Introduction to Video	3
CM-285	History of Photography	3
CM-315	Social Media	3
CM-360	Television Production II	3
CM-396	Video Editing	3
EN-165	Oral Literature: the Art of Storytelling	3
EN-168	Film and Literature	3
EN-256	Creative Writing: Fiction	3
EN-257	The Power of Memoir	3
EN-258	Creative Writing: Nonfiction	3
EN-260	Creative Writing: Poetry I	3
EN-262	Creative Writing: Poetry II	3
EN-353	Narrative Journalism	3
GL/AR-112	World Art Survey I	3
GL/AR-113	World Art Survey II	3
GL/MU-140	World Music	3
HE-140	Creative Arts and Health	3
MU-100	Music Fundamentals	3
MU-101	Fundamentals of Music and Aural Skills	3
MU-104	Class Piano	1
MU-115	Music Appreciation	3
MU-125	Jazz Appreciation	3
MU-140	World Music	3
MU-185	Composition I	3
MU-190	Piano Class	1
MU-205	Music Theory I	3
MU-210	Music Theory II	3
MU-215	Chorus and Music Theory	3
MU-220	Chorus	1
MU-222	African Drumming	3
MU-225	Band	0.5-1
MU-226	Band and Music Theory	3
MU-228	Piano Ensemble	1
MU-231	Women in Music	3
MU-237	Music in the Elementary School	3

MU-250	Music of the Cinema:Spectacle, Splendor, And Spielberg	3
MU-255	The Golden Era of Piano Music	3
MU-260	Symphonic Music	3
MU-265	The Concerto	3
MU-281	Music History I	3
MU-282	Music History II	3
MU-300	Chorale	1
MU-305	Music Theory II	3
MU-321	Small Ensemble	0.5-1
SO-235	Music and Social Change	3
SP-331	Spanish Civilization	3
TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-226	Script Analysis	3
TH-236	History of Theatre I	3
TH-270	History of American Entertainment I	3
TH-271	History of American Entertainment II	3
TH-272	History of Costume	3
TH-275	Introduction to Stagecraft and Design	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
TH-321	Rehearsal and Performance	3
TH-348	Stage Combat	3
TH-360	Scenic Design for Theatre	3
TH-370	Costume Design for Theatre	3
TH-390	Lighting Design for Theatre	3
VP-200	Critical Thinking in the Arts	3
VP-210	Contemporary Dance Styles I	3
VP-310	Contemporary Dance Styles II	3
WO/AR-225	Art Since Mid-Century	3
WO/CM-241	Understanding Movies	3
WO/MU-231	Women in Music	3

Diversity Across the Curriculum

(3 credits) [DAC]

Students must complete one Diversity Across the Curriculum course.

Courses in this area:

- Study historical experiences, cultural patterns, and social advantages and disadvantages of different groups within the society.
- Explore social problems such as racism, prejudice, discrimination, and exploitation as both mainstream and non-mainstream groups experience them.
- Examine the diversity within each group's experience and how such experiences are dynamic and continuously changing.
- Help students develop a sound knowledge of the methods of thinking about issues of diversity, particularly the ability to distinguish facts from interpretations and opinions.
- Include materials written by as well as about persons from diverse groups.
- Develop an appreciation/respect for members of diverse groups.
- Demonstrate how to communicate culture-specific and/or culture-general ways with diverse groups in various contexts.

AR-112	World Art Survey I	3
AR-113	World Art Survey II	3
AR-118	Global Art History	3
AR-140	Drawing Fundamentals	3
AR-165	Creating Cultural Forms	3
AR-225	Art Since Mid-20th Century	3
CD-400	Introduction to Aural Rehabilitation	3
CM-213	Gender and the Media	3
CM-384	Media Criticism	3
ED-206	Young Children, Lerning and Special Needs	3
ED-270	Diversity & Multicultural Ed	3
ED-304	Best Practices for English Language Learners	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
EN-132	World Literature	3
EN-156	Mythology	3
EN-167	Literature and Human Rights	3
EN-169	Ethnic Literature in the U.S.	3
EN-170	Search for Identity	3
EN-345	American Women Writers	3
EN-370	Antislavery Literature	3

ET-100	Introduction to Ethnic Studies	3
FR-341	Introduction to French Literature	3
GE-255	Geography of Africa	3
GL/ED-339	Children's Literature: Multicultural Literature for PK-9	3
GL/EN-132	World Literature: Survey of Asian, African and Latin American Literature	3
GL/EN-167	Literature and Human Rights	3
GL/EN-169	Ethnic Literature in the U.S.	3
GL/HC-202	Introduction to Global Health	3
GL/HI-214	Modern Latin America	3
GL/HI-230	Nicaragua, the US and the World	3
GL/HI-248	Seminar on Globalization and Human Rights	3
GL/HI-267	US-Latin American Relations	3
GL/PH-150	Women in Western Ideas	3
GL/PH-177	Introduction to Latin American Philosophy	3
GL/SP-332	The Hispanic World Today	3
GL/UR-353	Aging in a Global Society	3
HC-202	Introduction to Global Health	3
HE-350	Community Health Education	3
HI-203	The United States Since 1945	3
HI-214	Modern Latin America	3
HI-215	History of American Thought	3
HI-217	US Social History	3
HI-230	Nicaragua, the US and the World	3
HI-248	Seminar on Globalization & Human Rights	3
HI-267	US-Latin American Relations	3
HI-274	Sex, Marriage and the Family	3
HI-285	History of Baseball	3
HI-314	20th Century Middle East History	3
HI-320	Citizen Nation	3
HI-322	Nationalism	3
HI-345	Religions in America	3
MU-222	African Drumming	3
NU-340	Nursing Science II	9
NU-344	Nursing Science II	7
NU-432	Advanced Nursing Perspectives in Chronic Illness	3
PH-133	Social and Political Ethics	3
PH-150	Women in Western Ideas	3
PH-152	Philosophy of Love and Sex	3
PH-177	Introduction to Latin American Philosophy	3
PH-178	Africana Philosophy	3
PH-231	Philosophy of Law	3
PO-243	City Politics	3
PO-264	American Political Thought	3
PO-265	Racial and Ethnic Politics	3
PO-320	Citizen Nation	3
SO-190	Sport and Society	3
SO-228	Latina-Latino Experiences in the U.S. and the World	3
SO-250	Sociology of Religion	3
SO-255	Sociology of Disability	3
SO-285	Race, Class and Gender	3
SO-295	Sociology of Death & Dying	3
SO-350	Social Stratification	3
SO-355	Gender and Sexuality	3
SP-191	Special Topics in Spanish	3
SP-292	Spanish for Women's Health	3
SP-332	The Hispanic World Today	3
TH-226	Script Analysis	3
TH-237	History of Theatre II	3
TH-290	Theatre for Young Audiences	3
UR-103	Introduction to Women's Studies	3
UR-353	Aging in a Global Society	3
VP-200	Critical Thinking in the Arts	3
WO/CM-213	Gender and the Media	3
WO/ED-339	Childern's Literature: Multicultural Literature for Pk-9	3
WO/EN-132	World Lit: Asian, African, Latin American	3
WO/EN-167	Literature and Human Rights	3
WO/FR-341	Introduction to French Literature	3
WO/HI-217	US Social History	3
WO/HI-230	Nicaragua, the US and the World	3
WO/HI-274	Sex, Marriage and the Family	3
WO/HI-320	Citizen Nation	3
WO/NU-340	Nursing Science II	4.5

WO/PH-150	Women in Western Ideas	3
WO/PO-320	Citizen Nation	3
WO/SO-285	Race, Class and Gender	3
WO/SO-355	Gender and Sexuality	3
WO/UR-103	Introduction to Women's Studies	3
WO/UR-353	Aging in a Global Society	3

First-Year Seminar

(3 credits) [FYS]

All first-time, first-year students and students transferring with fewer than 15 credits will be enrolled in and must complete a First-Year Seminar. The First-Year Seminar is a three-credit course taught exclusively to first-year students in a small seminar format. First-year seminars are listed with the LC or department prefix, followed by the number 193 (LC193). Any make-up of the First-Year Seminar requirement must be successfully completed within the first 60 credits of study.

First-Year Seminars:

- Engage beginning college students and explore diverse topics that are more controversial or more narrowly focused than standard introductory courses.
- Encourage students to apply the knowledge that they acquire to address specific problems and challenges within the University, the community, and the world.
- Encourage students to be both active and reflective learners.
- Include assignments or activities that orient students to and require the use of the library, educational technology, and standard methods of reference and citation,
- Encourage students to participate in student life and community activities that are part of the first-year experience.
- First-Year Seminars differ from other courses in that they have a limited enrollment, are designed for first-year students, and emphasize the academic tools necessary to ensure a successful Worcester State University experience.

AR-193	First Year Seminar in Art	3
BA-193	Special Topics in Business First -Year Students	3
BI-193	First Year Seminar Biology	3
CD-193	Special Topics in Communication Sciences And Disorders for First-Year Students	3
CH-193	Special Topics in Chemistry for First Year Students	3
CJ-193	Special Topics for First-Year Students	3
CM-193	Special Topics in Communication for First Year Students	3
CS-193	Special Topics in Computer Science for First Year Students	3
EC-193	First Year Seminar Economics	3
ED-193	First Year Seminar Education	3
EN-193	First Year Seminar English	3
FR-193	Special Topics in French for First Year Students	3
GE-193	Special Topics in Geography for First- Year Students	3
GS-193	First Year Seminar in Geography	3
HE-193	First Year Seminar Health	3
HI-193	First Year Seminar History	3
LC-193	LASC First Year Seminar	3
MA-193	Special Topics in Math for First Year Students	3
MU-193	Special Topics in Music:First Year Students	3
NU-193	Special Topics in Nursing for First Year Students	3
OT-193	First Year Seminar: Occupational Therapy	3
PH-193	First Year Seminar Philosophy	3
PO-193	First Year Seminar Political Science	3
PS-193	Special Topics in Psychology for First Year Students	3
PY-193	First Year Seminar	3
SO-193	First Year Seminar Sociology	3
SP-193	First Year Seminar Spanish	3
TH-193	Special Topics in Theater:First-Year Students	3

UR-193	First Year Seminar Urban Studies	3
VP-193	Special Topics in Visual and Performing Arts: First-Year Students	3

Global Perspectives

(3 credits) [GP]

Students must complete one course. Courses in this area:

- Study the culture, history, or language of a nation or geopolitical area other than the U.S.
- Consider culture, power, and place in phenomena such as globalization, cultural colonialism, transnationalism, and human rights.
- Investigate issues about the environment and sustainable development in phenomena such as the use of natural resources and macroeconomic problems that affect people and ecosystems around the world.
- Study governance, peace, and justice in a global context.
- Analyze the international political economy in relation to governments, enterprises, societal groups, and communities from different countries.
- Consider issues such as race, class, gender, age, sexuality, language, ability, indigenous populations, transnational labor, and refugee migration.

AR-118	Global Art History	3
AR-140	Drawing Fundamentals	3
AR-160	Sculpture I	3
AR-165	Creating Cultural Forms	3
AR-225	Art Since Mid-20th Century	3
AR-235	3D Sculpture Studio	3
BI-112	Diseases and Mankind	3
BI-114	Plants and Human Affairs	3
BI-130	Field Biology	4
CM-152	Ecotourism & Photography in Costa Rica	3
EC-308	International Trade	3
ED-271	International and Comparative Education	3
EN-132	World Literature	3
EN-167	Literature and Human Rights	3
EN-172	Women and Literature	3
EN-240	Survey of Postcolonial and Transcultural Literature	3
EN-348	Postcolonial Women's Writing	3
FR-101	Beginning French I	3
FR-102	Beginning French II	3
FR-210	Intermediate French I	3
FR-211	Intermediate French II	3
FR-341	Introduction to French Literature	3
FR-346	Twentieth Century French Literature	3
GE-102	Human Geography	3
GE-110	World Regional Geography I	3
GE-111	World Regional Geography II	3
GE-255	Geography of Africa	3
GL/BI-112	Diseases and Mankind	3
GL/BI-114	Plants and Human Affairs	3
GL/EC-308	International Trade	3
GL/ED-271	International and Comparative Education	3
GL/EN-132	World Literature: Survey of Asian, African and Latin American Literature	3
GL/EN-167	Literature and Human Rights	3
GL/EN-240	Survey of Postcolonial and Transcultural Literature	3
GL/EN-348	Postcolonial Women's Writing	3
GL/FR-210	Intermediate French I	3
GL/FR-211	Intermediate French II	3
GL/FR-346	Twentieth Century French Literature	3
GL/GE-102	Human Geography	3
GL/GE-110	World Regional Geography I	3
GL/GE-111	World Regional Geography II	3
GL/HC-202	Introduction to Global Health	3
GL/HI-103	World Civilization I	3
GL/HI-104	World Civilization II	3
GL/HI-105	World Civilization III	3
GL/HI-201	International Relations I	3
GL/HI-202	International Relations II	3
GL/HI-214	Modern Latin America	3
GL/HI-248	Seminar on Globalization and Human Rights	3
GL/HI-251	The Roots of China's Rise: Reform, Revolution, and Reinvention	3
GL/HI-261	Middle East History I	3

GL/HI-335	Imperial Crossroads of Modern East Asia	3
GL/HI-337	Travels in Asia	3
GL/NU-357	Global Perspectives in Health	3
GL/PH-170	Ancient Chinese Philosophies in a Cultural Perspective	3
GL/PH-172	Asian Philosophies and Contemporary Perspectives	3
GL/PH-177	Introduction to Latin American Philosophy	3
GL/PH-241	Genocide and Human Rights	3
GL/PH-250	Global Feminism	3
GL/PH-251	Mass Violence Against Women	3
GL/PO-201	International Relations I	3
GL/PO-202	International Relations II	3
GL/SO-425	Global Development	3
GL/SP-332	The Hispanic World Today	3
GL/UR-290	Gender and the City	3
GL/UR-353	Aging in a Global Society	3
GL/WL-101	Beginning World Language I	3
GL/WL-102	Beginning World Langauge II	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
HE-350	Community Health Education	3
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-201	International Relations I	3
HI-202	International Relations II Globalization	3
HI-204	History of Science and Technology	3
HI-214	Modern Latin America	3
HI-241	English Constitutional History	3
HI-248	Seminar on Globalization & Human Rights	3
HI-251	Roots of China's Rise: Reform, Revolution and Reinvention	3
HI-255	Faculty-Led Study Abroad: China Cultural Immersion	3
HI-261	Middle East History I	3
HI-262	Middle East History II: The Ottoman Empire, 1289-1920	3
HI-263	US-Middle East Relations	3
HI-314	20th Century Middle East History	3
HI-322	Nationalism	3
HI-335	Imperial Crossroads of Modern East Asia	3
HI-337	Travels in Asia	3
MU-222	African Drumming	3
NU-357	Global Perspectives in Health	3
PH-170	Ancient Chinese Philosophies in a Cultural Perspective	3
PH-171	Buddhism:Theory and Meditative Practice	3
PH-172	Asian Philosophies and Contemporary Perspectives	3
PH-177	Introduction to Latin American Philosophy	3
PH-221	Existentialism and Phenomenology	3
PH-241	Genocide and Human Rights	3
PH-250	Global Feminisms	3
PH-251	Mass Violence Against Women	3
PH-263	Film and Philosophy	3
PH-360	Philosophy of History	3
PO-201	International Relations I	3
PO-202	International Relations II: Globalization	3
PO-220	Comparative Politics I	3
PO-221	Comparative Politics II	3
PO-241	English Constitutional History	3
SO-270	Social Theory I	3
SO-425	Global Development	3
SP-191	Special Topics in Spanish	3
SP-292	Spanish for Women's Health	3
SP-326	Spanish for the Professions	3
SP-332	The Hispanic World Today	3
TH-237	History of Theatre II	3
UR-290	Gender and the City	3
UR-353	Aging in a Global Society	3
WL-101	Beginning World Language	3
WL-102	Beginning World Language II	3
WO/EN-132	World Lit: Asian, African, Latin American	3
WO/EN-167	Literature and Human Rights	3

WO/EN-240	Postcolonial & Transcult Literature	3
WO/EN-348	Postcolonial Women's Writing	3
WO/FR-341	Introduction to French Literature	3
WO/PH-241	Genocide and Human Rights	3
WO/PH-250	Global Feminisms	3
WO/UR-290	Gender and the City	3
WO/UR-353	Aging in a Global Society	3

Human Behavior and Social Processes

(3 credits) [HBS]

Students must complete one course.

Courses in this area:

- Develop an understanding of how factors such as market forces, politics, demographics, physical environment, and culture affect individual behavior and thinking.
- Examine political, economic, and social structures and the interplay between the individual and society.
- Explore the ways in which the individual is an agent in shaping and understanding his or her own experiences.
- Consider the ways in which individual and social roles and identities are socially constructed.
- Show how the results of social research can be used to effect social change.
- Teach the differences between and appropriate uses of qualitative and quantitative research methods.
- Investigate the ways in which scientific inquiry is value-laden.
- Help students understand the ways in which the various social sciences inform one another.

BI-111	Social Biology	3
BT-101	Introduction to Forensic Sciences	4
CD-100	Introduction to Human Communication and its Disorders	3
CJ-215	Art Crimes	3
CM-100	Intro to Mass Communication	3
CM-103	Survey of Radio and Television	3
CM-180	Introduction to Advertising	3
CM-213	Gender and the Media	3
CM-240	Principles of Public Relations Practices	3
CM-384	Media Criticism	3
CM-400	Advertising and Public Relations Research	3
CM-405	Mass Communication Research	3
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
ED-149	Introduction to the Teaching Profession Middle/ Secondary School	3
ED-160	Early Childhood Education Today	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
ET-100	Introduction to Ethnic Studies	3
GE-102	Human Geography	3
GE-110	World Regional Geography I	3
GE-111	World Regional Geography II	3
GE-250	Urban Geography	3
GE-285	Sustainable Communities	3
GL/ED-339	Children's Literature: Multicultural Literature for PK-9	3
GL/EN-167	Literature and Human Rights	3
GL/GE-102	Human Geography	3
GL/GE-110	World Regional Geography I	3
GL/GE-111	World Regional Geography II	3
GL/GE-285	Sustainable Communities	3
GL/PH-150	Women in Western Ideas	3
GL/PS-365	Cultural Psychology	3
GL/SO-425	Global Development	3
GL/UR-201	Analysis of Urban Systems	3
GL/UR-290	Gender and the City	3
HE-220	Mental Health Education	3
HI-218	US Constitutional History I	3
HI-219	US Constitutional History II	3
HI-241	English Constitutional History	3
HI-322	Nationalism	3

HI-380	American Foreign Policy Since the Cold War	3
PB-200	Introduction to Psychobiology	4
PH-100	Introduction to Philosophy	3
PH-102	History of Modern Western Philosophy 1600-1800	3
PH-130	Ethics: Human Conduct & Values	3
PH-131	Medical Ethics	3
PH-132	Business Ethics	3
PH-133	Social and Political Ethics	3
PH-150	Women in Western Ideas	3
PH-152	Philosophy of Love and Sex	3
PH-201	19th Century European Philosophy	3
PH-202	Selected Topics: 20th-21st Century Western Philosophy	3
PH-231	Philosophy of Law	3
PH-242	Race, Nation, Class, Gender and Sexuality	3
PH-260	Philosophy of Science	3
PO-110	American Government	3
PO-150	Foundations of Legal Studies	3
PO-213	The Modern Presidency	3
PO-215	State and Local Government	3
PO-216	Political Parties & Pressure Groups	3
PO-217	The Legislative Process	3
PO-218	US Constitutional History I	3
PO-219	US Constitutional History II	3
PO-220	Comparative Politics I	3
PO-221	Comparative Politics II	3
PO-230	Campaigns and Elections	3
PO-241	English Constitutional History	3
PO-243	City Politics	3
PO-262	Principles of US Public Policy	3
PO-265	Racial and Ethnic Politics	3
PO-311	Environmental Politics and Policy	3
PO-312	Health Politics and Policy	3
PO-380	American Foreign Policy Since the Cold War	3
PS-101	General Psychology	3
PS-210	Developmental Psychology	3
PS-365	Cultural Psychology	3
SO-100	Introduction to Sociology	3
SO-190	Sport and Society	3
SO-200	Contemporary Social Problems	3
SO-215	Medical Sociology	3
SO-220	Sociology of the Family	3
SO-235	Music and Social Change	3
SO-250	Sociology of Religion	3
SO-255	Sociology of Disability	3
SO-285	Race, Class and Gender	3
SO-295	Sociology of Death & Dying	3
SO-350	Social Stratification	3
SO-355	Gender and Sexuality	3
SO-425	Global Development	3
SO-435	Introduction to Social Enterprise	3
SP-293	Health and the Latino Community	3
UR-101	Introduction to Urban Studies	3
UR-103	Introduction to Women's Studies	3
UR-201	Analysis of Urban Systems	3
UR-216	Woman and Aging in the Urban Enviroment	3
UR-230	Technology, Public Policy and Urban Society	3
UR-240	Introduction to Qualitative Research Methods for the Social Sciences	3
UR-245	Introduction to Survey Research Method For Social Science	3
UR-290	Gender and the City	3
UR-311	Urban Politics and Policies	3
UR-331	Crime and the City	3
UR-380	Public Policy and Cultural Diversity	3
WO/CM-100	Intro to Mass Communications	3
WO/CM-213	Gender and the Media	3
WO/ED-339	Childern's Literature: Multicultural Literature for Pk-9	3
WO/HE-220	Mental Health Education	3
WO/PH-150	Women in Western Ideas	3
WO/PS-312	Psychology of Adolescence	3
WO/SO-285	Race, Class and Gender	3
WO/SO-355	Gender and Sexuality	3

WO/UR-101	Introduction to Urban Studies	3
WO/UR-103	Introduction to Women's Studies	3
WO/UR-290	Gender and the City	3
WO/UR-380	Public Policy& Cult Diversity	3

Individual and Community Well-being

(3 credits) [ICW]

Students must complete one course.

Courses in this area:

- Explore the growth and development of the individual and address the interconnected dimensions of well-being.
- Study and evaluate the ways that the local, state, national, or private sectors frame and implement social policies, and the consequences of these policies for well-being.
- Examine social structures and practices such as urban and rural development, planning, funding allocations, and legislative initiatives designed to secure the well-being of the community.
- Examine the short- and long-term consequences of beliefs, behaviors, and policies that affect the well-being of individuals and communities.
- Address the role of prevention strategies in promoting well-being.

CD-100	Introduction to Human Communication and its Disorders	3
EC-102	Consumer Economics	3
EC-104	Personal Financial Planning	3
EC-208	Economics of Health Care	3
ED-155	Teaching and Learning in Elementary School	3
ED-206	Young Children, Lerning and Special Needs	3
ED-207	The Adolescent in Schools & Society	3
ED-271	International and Comparative Education	3
EN-272	News Reporting and Writing I	3
EN-354	Opinion Writing	3
GL/ED-271	International and Comparative Education	3
GL/HC-202	Introduction to Global Health	3
GL/NU-357	Global Perspectives in Health	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
HE-100	Personal Health	3
HE-120	Health and Nutrition	3
HE-220	Mental Health Education	3
HE-350	Community Health Education	3
HE-400	Special Topics	3
HI-290	Health and Healing in America	3
JO-101	Introduction to Journalism	3
LC-293	Peer Mentoring	3
NU-357	Global Perspectives in Health	3
PH-152	Philosophy of Love and Sex	3
PH-180	Sports and Philosophy	3
PH-225	Philosophy of Language	3
PO-312	Health Politics and Policy	3
SO-100	Introduction to Sociology	3
SO-215	Medical Sociology	3
SO-250	Sociology of Religion	3
SO-255	Sociology of Disability	3
SO-295	Sociology of Death & Dying	3
SO-355	Gender and Sexuality	3
SO-435	Introduction to Social Enterprise	3
SP-291	Introduction to Medical Spanish	3
SP-292	Spanish for Women's Health	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
TH-348	Stage Combat	3
UR-103	Introduction to Women's Studies	3
UR-250	Introduction to Urban Planning	3
UR-320	Human Needs and Social Policy	3
WO/HE-220	Mental Health Education	3
WO/SO-355	Gender and Sexuality	3
WO/UR-103	Introduction to Women's Studies	3

Natural Systems and Processes (LAB)

Students must complete a minimum of two NSP courses (p. 59). At least one of the courses taken in this area must have a laboratory component.

Courses in this area:

- Study physical and natural systems and processes.
- Apply scientific models, theories, and technology to problems facing society.
- Have an analytical and/or quantitative component and include interpretation, communication and/or presentation of data and results.
- Compare and contrast various modes of scientific inquiry.
- Place scientific inquiry within its historical and contemporary contexts.
- Use and reflect on the scientific method of investigation.
- Address the strengths and limitations of scientific inquiry in human understanding.
- Encourage students to become scientifically literate citizens and be able to evaluate scientific information.

BI-101	Concepts of Biology	4
BI-104	The Human Animal Laboratory	1
BI-116	Animal Biology	4
BI-117	Humans and the Environment	4
BI-118	Dinosaurs	4
BI-130	Field Biology	4
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
BI-380	Biodiversity and Conservation Biology	4
CH-112	Survey of Chemistry	4
EV-120	Integrated Environmental Science for Educators	4
GS-140	Physical Geology	4
PY-105	Concepts in Physics I	3
PY-112	Physics in Art	4
PY-221	General Physics I	4
PY-222	General Physics II	4
PY-241	Physics I (Mechanics)	4
PY-242	Physics II (Electricity, Magnetism and Optics)	4

Natural Systems and Processes (NSP)

(minimum of 6 credits)

Students must complete a minimum of two NSP courses. At least one of the courses taken in this area must have a laboratory component (p. 59).

Courses in this area:

- Study physical and natural systems and processes.
- Apply scientific models, theories, and technology to problems facing society.
- Have an analytical and/or quantitative component and include interpretation, communication and/or presentation of data and results.
- Compare and contrast various modes of scientific inquiry.
- Place scientific inquiry within its historical and contemporary contexts.
- Use and reflect on the scientific method of investigation.
- Address the strengths and limitations of scientific inquiry in human understanding.
- Encourage students to become scientifically literate citizens and be able to evaluate scientific information.

BI-101	Concepts of Biology	4
BI-103	The Human Animal	3
BI-104	The Human Animal Laboratory	1
BI-111	Social Biology	3
BI-112	Diseases and Mankind	3
BI-114	Plants and Human Affairs	3
BI-116	Animal Biology	4
BI-117	Humans and the Environment	4
BI-118	Dinosaurs	4

BI-120	Darwinian Revolution	3
BI-130	Field Biology	4
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
BI-271	Basic Kinesiology	3
BT-101	Introduction to Forensic Sciences	4
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
CH-106	Paper Or Plastics?	3
CH-112	Survey of Chemistry	4
CH-250	Instrumental Technology for Forensic Analysis	4
EV-120	Integrated Environmental Science for Educators	4
EV-150	Environmental Science	3
GL/BI-112	Diseases and Mankind	3
GL/BI-114	Plants and Human Affairs	3
GL/CH-106	Paper Or Plastics?	3
GS-101	Physical Geography	3
GS-110	Meteorology	3
GS-140	Physical Geology	4
GS-150	Humans and the Cold Regions	3
GS-165	Geographic Information Systems I	4
GS-218	Introduction to Remote Sensing	3
HC-203	Introduction to Epidemiology	3
PB-200	Introduction to Psychobiology	4
PO-311	Environmental Politics and Policy	3
PY-101	Introduction to Astronomy	3
PY-105	Concepts in Physics I	3
PY-106	Concepts in Physics II	3
PY-112	Physics in Art	4
PY-114	Physics of Waves	3
PY-221	General Physics I	4
PY-222	General Physics II	4
PY-241	Physics I (Mechanics)	4
PY-242	Physics II (Electricity, Magnetism and Optics)	4

Quantitative Literacy Across the Curriculum

(3 credits) [QLAC]

Students must complete one Quantitative Literacy Across the Curriculum course. Within the framework of a scholarly discipline Quantitative Literacy courses will develop a student's ability to.:

- State and evaluate important assumptions in the quantitative reasoning process (estimation, modeling, and data analysis).
- Convert relative information into various mathematical forms (e.g. equations, graphs, diagrams, tables, words).
- Make judgements and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis.
- Express quantitative evidence to support the argument or purpose of the work (in terms of what evidence is used an how it is formatted, presented and contextualized.)
- Make judgments regarding the appropriateness of a numerical answer.
- Explain information presented in mathematical form (e.g. equations, graphs, diagrams, tables, words).

AR-123	Design Fundamentals	3
BA-316	Financial Management	3
BI-203	Genetics	4
CD-201	Hearing Science	3
CH-250	Instrumental Technology for Forensic Analysis	4
CJ-250	Quantifying Crime	3
CS-242	Data Structures	3
ED-308	ECE - Mathematics	3
ED-325	Elementary Math	3
EN-214	Introduction to Digital Humanities	3
GS-110	Meteorology	3
GS-140	Physical Geology	4
GS-210	Geomorphology	4
GS-225	Oceanography	3

HC-203	Introduction to Epidemiology	3
NU-430	Research Seminar in Nursing	3
NU-525	Research for Evidence Based Practice	3
PS-275	Psychological Statistics	4
PY-112	Physics in Art	4
PY-114	Physics of Waves	3
PY-221	General Physics I	4
PY-241	Physics I (Mechanics)	4
SO-275	Social and Behavioral Statistics	3
VP-200	Critical Thinking in the Arts	3

Quantitative Reasoning

(minimum of 6 credits) [QR]

Students must complete a minimum of two QR courses. One must be a course with the MA (mathematics) prefix and completed within the first 60 credits of study (exceptions to this time frame may be necessary for transfer students). All students must pass the Math Placement Test at the stipulated level in order to register for a MA course.

Courses in this area:

- Acquaint students with formal systems, procedures, and sequences of operations.
- Strengthen students' understanding of variables and functions.
- Apply mathematical techniques to the analysis and solution of real-life problems.
- Develop an understanding of and facility with statistical analysis, including an understanding of its applications and limitations. Courses meeting these criteria must emphasize why statistical inference works and not simply how to use statistical techniques.
- Strengthen understanding of the relationship between algebraic and graphical representations.
- Emphasize the importance of accuracy, including precise language and careful definitions of mathematical concepts.
- Understand both underlying principles and practical applications of one or more fields of mathematics.

CH-120	General Chemistry I	4
CS-101	Basics of Computer Science	3
CS-120	Microcomputer Applications	3
CS-124	Health Informatics	3
CS-135	Programming for Non-CS Majors	3
CS-155	Computer Networking, Security and Databases	3
CS-265	Database Applications	3
EC-150	Statistics	3
MA-105	Survey of Mathematics	3
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-150	Statistics I	3
MA-180	Introduction to Functions	3
MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
NU-333	Health Informatics	3
PH-115	Logic I	3
PH-215	Logic II	3
PS-275	Psychological Statistics	4

The United States and Its Role in the World

(3 credits) [USW]

Students must complete one course.

Courses in this area:

- Study cultures, histories, and social practices in the U.S., including consideration of the ways that differences in power affect different racial, ethnic, gender, and cultural groups as evidenced by readings, texts, testimony, and narratives.
- Address issues of economic and political power that shape the U.S. and the world.
- Trace the roots and development of U.S. political and economic institutions at home and around the globe.
- Focus on particular aspects of U.S. culture and how understanding them helps to illuminate the larger context of U.S. society and its role in its world.

EN-169	Ethnic Literature in the U.S.	3
EN-272	News Reporting and Writing I	3
EN-345	American Women Writers	3
EN-347	Studies in U.S. Ethnic Literature	3
EN-370	Antislavery Literature	3
GE-285	Sustainable Communities	3
GL/EN-169	Ethnic Literature in the U.S.	3
GL/GE-285	Sustainable Communities	3
GL/HI-112	US History II	3
GL/HI-201	International Relations I	3
GL/HI-202	International Relations II	3
GL/HI-230	Nicaragua, the US and the World	3
GL/HI-248	Seminar on Globalization and Human Rights	3
GL/HI-267	US-Latin American Relations	3
GL/PH-241	Genocide and Human Rights	3
GL/PH-251	Mass Violence Against Women	3
GL/PO-201	International Relations I	3
GL/PO-202	International Relations II	3
HI-111	US History I	3
HI-112	US History II	3
HI-201	International Relations I	3
HI-202	International Relations II Globalization	3
HI-203	The United States Since 1945	3
HI-211	History of US Foreign Policy I	3
HI-212	History of US Foreign Policy II	3
HI-215	History of American Thought	3
HI-217	US Social History	3
HI-218	US Constitutional History I	3
HI-219	US Constitutional History II	3
HI-230	Nicaragua, the US and the World	3
HI-248	Seminar on Globalization & Human Rights	3
HI-263	US-Middle East Relations	3
HI-267	US-Latin American Relations	3
HI-285	History of Baseball	3
HI-300	The Early National Period of the US: 1783-1829	3
HI-320	Citizen Nation	3
HI-345	Religions in America	3
HI-351	Age of Jackson	3
Hi-356	The History of the Cold War	3
HI-366	American Revolutionary Period	3
HI-380	American Foreign Policy Since the Cold War	3
JO-101	Introduction to Journalism	3
PH-151	Race, Gender, and the Law	3
PH-163	Philosophy on Television	3
PH-178	Africana Philosophy	3
PH-231	Philosophy of Law	3
PH-240	Political Theory	3
PH-241	Genocide and Human Rights	3
PH-242	Race, Nation, Class, Gender and Sexuality	3
PH-251	Mass Violence Against Women	3
PH-360	Philosophy of History	3
PO-110	American Government	3
PO-201	International Relations I	3
PO-202	International Relations II: Globalization	3
PO-211	History of US Foreign Policy I	3
PO-212	History of US Foreign Policy II	3
PO-213	The Modern Presidency	3
PO-215	State and Local Government	3
PO-216	Political Parties & Pressure Groups	3
PO-218	US Constitutional History I	3
PO-219	US Constitutional History II	3
PO-264	American Political Thought	3
PO-265	Racial and Ethnic Politics	3
PO-320	Citizen Nation	3
PO-380	American Foreign Policy Since the Cold War	3
SO-190	Sport and Society	3
SO-228	Latina-Latino Experiences in the U.S. and the World	3
TH-270	History of American Entertainment I	3
TH-271	History of American Entertainment II	3
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-380	Public Policy and Cultural Diversity	3
WO/HI-111	US History I	3

WO/HI-112	US History II	3
WO/HI-113	US History III	3
WO/HI-217	US Social History	3
WO/HI-230	Nicaragua, the US and the World	3
WO/HI-320	Citizen Nation	3
WO/PH-240	Political Theory	3
WO/PH-241	Genocide and Human Rights	3
WO/PO-320	Citizen Nation	3
WO/UR-101	Introduction to Urban Studies	3
WO/UR-212	American Metropolitan Evolution	3
WO/UR-380	Public Policy& Cult Diversity	3

Thought, Language, and Culture

(3 credits) [TLC]

Students must complete one course.

Courses in this area:

- Explore human thought, history, culture, art, literature, and language (including world languages).
- Present the subject in the context of competing theoretical frameworks, for example, about race, gender, historiography, textual analysis, or cultural interpretation.
- Synthesize approaches from different disciplines.
- Explore problems of ethics, politics, aesthetics, epistemology, and metaphysics.
- Use original works as the primary object of study.
- Require discursive written work, including standard references and citations, for evaluation or extensive written work in a second language.

AB-101	Beginning Arabic I	3
AB-102	Beginning Arabic II	3
AB-210	Intermediate Arabic I	3
AB-211	Intermediate Arabic II	3
AR-100	Cross Media Studio	3
AR-112	World Art Survey I	3
AR-113	World Art Survey II	3
AR-200	History of American Art	3
AR-220	Foundations of Modern Art	3
AR-240	Watercolor	3
AR-270	Driftwood to Dumpsters	3
AR-275	Gallery and Museum Studies	3
AR-285	History of Photography	3
BI-120	Darwinian Revolution	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CJ-215	Art Crimes	3
CM-100	Intro to Mass Communication	3
CM-103	Survey of Radio and Television	3
CM-106	Communications and the Internet	3
CM-110	Public Speaking	3
CM-213	Gender and the Media	3
CM-241	Understanding Movies	3
CM-242	Understanding Video Games	3
CM-250	Music of the Cinema:Spectacle, Splendor, and Spielberg	3
CM-285	History of Photography	3
CM-315	Social Media	3
CM-384	Media Criticism	3
ED-304	Best Practices for English Language Learners	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
EN-105	Introduction to Literature	3
EN-130	Ancient Classics of Western Literature	3
EN-132	World Literature	3
EN-140	Introduction to Poetry	3
EN-145	Introduction to Drama	3
EN-150	The Short Story	3
EN-152	The Novelette	3
EN-156	Mythology	3
EN-158	Science Fiction	3
EN-160	Literature of the Bible	3
EN-164	Fantasy, Faerie and Folk	3
EN-165	Oral Literature: the Art of Storytelling	3
EN-168	Film and Literature	3
EN-169	Ethnic Literature in the U.S.	3
EN-170	Search for Identity	3
EN-172	Women and Literature	3
EN-174	Women Poets	3

EN-250	Creative Thinking and Critical Writing	3
EN-255	Methods of Literary Study	3
EN-257	The Power of Memoir	3
EN-260	Creative Writing: Poetry I	3
EN-266	Journalism: Practice and Techniques	3
EN-300	History of the English Language	3
EN-303	Arthurian Literature	3
EN-304	Witchcraft in Medieval and Renaissance Literature	3
EN-306	The Renaissance	3
EN-320	Victorian Literature	3
EN-321	Romantic and Victorian Gothic	3
EN-370	Antislavery Literature	3
ET-100	Introduction to Ethnic Studies	3
FR-101	Beginning French I	3
FR-102	Beginning French II	3
FR-210	Intermediate French I	3
FR-211	Intermediate French II	3
FR-321	Advanced French Composition I	3
FR-323	Advanced French Conversation	3
FR-331	General French Civilization	3
FR-341	Introduction to French Literature	3
FR-342	Survey of French Literature I	3
FR-344	Survey of French Literature II	3
FR-346	Twentieth Century French Literature	3
GL/AB-210	Intermediate Arabic I	3
GL/AR-112	World Art Survey I	3
GL/AR-113	World Art Survey II	3
GL/ED-339	Children's Literature: Multicultural Literature for PK-9	3
GL/EN-132	World Literature: Survey of Asian, African and Latin American Literature	3
GL/EN-169	Ethnic Literature in the U.S.	3
GL/FR-210	Intermediate French I	3
GL/FR-211	Intermediate French II	3
GL/FR-321	Advanced French Composition	3
GL/FR-323	Advanced French Conversation	3
GL/FR-346	Twentieth Century French Literature	3
GL/HI-103	World Civilization I	3
GL/HI-104	World Civilization II	3
GL/HI-105	World Civilization III	3
GL/HI-214	Modern Latin America	3
GL/HI-230	Nicaragua, the US and the World	3
GL/HI-251	The Roots of China's Rise: Reform, Revolution, and Reinvention	3
GL/HI-261	Middle East History I	3
GL/HI-335	Imperial Crossroads of Modern East Asia	3
GL/HI-337	Travels in Asia	3
GL/PH-150	Women in Western Ideas	3
GL/PH-170	Ancient Chinese Philosophies in a Cultural Perspective	3
GL/PH-177	Introduction to Latin American Philosophy	3
GL/PH-250	Global Feminism	3
GL/PS-365	Cultural Psychology	3
GL/SP-323	Spanish Conversation I	3
GL/SP-324	Advanced Spanish Conversation II	3
HE-242	Writing and Learning From Experience II	3
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-204	History of Science and Technology	3
HI-214	Modern Latin America	3
HI-215	History of American Thought	3
HI-217	US Social History	3
HI-224	English History I	3
HI-225	English History II	3
HI-230	Nicaragua, the US and the World	3
HI-251	Roots of China's Rise: Reform, Revolution and Reinvention	3
HI-255	Faculty-Led Study Abroad: China Cultural Immersion	3
HI-261	Middle East History I	3

HI-262	Middle East History II: The Ottoman Empire, 1289-1920	3
HI-274	Sex, Marriage and the Family	3
HI-285	History of Baseball	3
HI-290	Health and Healing in America	3
HI-300	The Early National Period of the US: 1783-1829	3
HI-314	20th Century Middle East History	3
HI-320	Citizen Nation	3
HI-335	Imperial Crossroads of Modern East Asia	3
HI-337	Travels in Asia	3
HI-345	Religions in America	3
HI-351	Age of Jackson	3
HI-366	American Revolutionary Period	3
MU-125	Jazz Appreciation	3
MU-231	Women in Music	3
MU-250	Music of the Cinema:Spectacle, Splendor, And Spielberg	3
PH-100	Introduction to Philosophy	3
PH-102	History of Modern Western Philosophy 1600-1800	3
PH-110	Critical Thinking	3
PH-130	Ethics: Human Conduct & Values	3
PH-131	Medical Ethics	3
PH-132	Business Ethics	3
PH-133	Social and Political Ethics	3
PH-150	Women in Western Ideas	3
PH-151	Race, Gender, and the Law	3
PH-163	Philosophy on Television	3
PH-170	Ancient Chinese Philosophies in a Cultural Perspective	3
PH-171	Buddhism:Theory and Meditative Practice	3
PH-177	Introduction to Latin American Philosophy	3
PH-178	Africana Philosophy	3
PH-201	19th Century European Philosophy	3
PH-202	Selected Topics: 20th-21st Century Western Philosophy	3
PH-221	Existentialism and Phenomenology	3
PH-225	Philosophy of Language	3
PH-240	Political Theory	3
PH-250	Global Feminisms	3
PH-260	Philosophy of Science	3
PH-263	Film and Philosophy	3
PO-223	Political Communication	3
PO-264	American Political Thought	3
PO-320	Citizen Nation	3
PS-365	Cultural Psychology	3
SO-228	Latina-Latino Experiences in the U.S. and the World	3
SO-270	Social Theory I	3
SP-101	Beginning Spanish I	3
SP-102	Beginning Spanish II	3
SP-191	Special Topics in Spanish	3
SP-210	Intermediate Spanish I	3
SP-211	Intermediate Spanish II	3
SP-291	Introduction to Medical Spanish	3
SP-293	Health and the Latino Community	3
SP-321	Advanced Spanish Composition I	3
SP-322	Advanced Spanish Composition II	3
SP-323	Spanish Conversation I	3
SP-324	Spanish Conversation II	3
SP-326	Spanish for the Professions	3
TH-226	Script Analysis	3
TH-236	History of Theatre I	3
TH-237	History of Theatre II	3
VP-200	Critical Thinking in the Arts	3
WO/AR-225	Art Since Mid-Century	3
WO/CM-100	Intro to Mass Communications	3
WO/CM-213	Gender and the Media	3
WO/CM-241	Understanding Movies	3
WO/ED-339	Childern's Literature: Multicultural Literature for Pk-9	3
WO/EN-132	World Lit: Asian, African, Latin American	3
WO/EN-156	Mythology	3
WO/EN-304	Witchcraft in Medieval & Renaissance Literature	3
WO/FR-341	Introduction to French Literature	3
WO/HI-217	US Social History	3

WO/HI-274	Sex, Marriage and the Family	3
WO/HI-320	Citizen Nation	3
WO/MU-231	Women in Music	3
WO/PH-150	Women in Western Ideas	3
WO/PH-240	Political Theory	3
WO/PH-250	Global Feminisms	3
WO/PO-320	Citizen Nation	3

Writing

(up to 6 credits) [WR1, WR2]

Students must complete one three-credit course devoted to addressing the rhetorical abilities necessary for effective college writing and an additional three-credit course emphasizing formal academic genres, academic research skills, and the presentation of information to academic audiences.

The core writing courses may not be taken pass/fail.

EN-101	English Composition I	3
EN-102	English Composition II	3
EN-202	Honors Composition	3

Writing Across the Curriculum

(3 credits) [WAC]

Students must complete one Writing Across the Curriculum course after completing the writing requirement. Students may complete the WAC requirement in a language other than English. Placement at the 300-level in a language other than English will satisfy the prerequisite for WAC courses in that language. Courses in this area:

- Require a variety of formal and informal writing assignments. Formal writing assignments may include traditional essays and research papers, case studies, process analyses, and reports on research findings. Informal writing assignments may include journals, lab notebooks, reading responses, and in-class essay examinations.
- Offer students instruction in the conventions of writing for a particular discipline.
- Assign writing of different lengths and different formats, for a minimum total of approximately 2500 words (or ten pages) during the course of the semester.
- Provide opportunities for revision.
- Incorporate clear explanations of assignments and various approaches to instruction such as workshops, individual conferences with the instructor, and/or assignment criteria handouts.
- Offer different types of feedback, such as traditional grading and evaluation, peer review groups, self-assessment, and writing center sessions.

AR-118	Global Art History	3
AR-160	Sculpture I	3
AR-165	Creating Cultural Forms	3
AR-225	Art Since Mid-20th Century	3
AR-270	Driftwood to Dumpsters	3
BA-390	Business and Social Research Methods	3
BI-202	Principles of Ecology	4
CD-301	Directed Observations	2
CD-401	Advanced Directed Observations	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CM-200	Writing for Communication	3
CM-213	Gender and the Media	3
CM-384	Media Criticism	3
CM-405	Mass Communication Research	3
EC-208	Economics of Health Care	3
ED-214	Emergent Literacy	3
ED-251	Principles of Curriculum, Instruction And Assessment in Middle and High School	3
ED-275	Curr/Instr in Elementary Ed	3
ED-353	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School	3
ED-354	Assessment, Adjustment to Practice, and Classroom Management in the Middle School	3
EN-168	Film and Literature	3
EN-172	Women and Literature	3
EN-214	Introduction to Digital Humanities	3
EN-250	Creative Thinking and Critical Writing	3
EN-252	Technical Writing	3

EN-253	Business Communications	3
EN-255	Methods of Literary Study	3
EN-257	The Power of Memoir	3
EN-266	Journalism: Practice and Techniques	3
EN-267	Journalism: Advanced Newswriting	3
EN-271	Journalism Workshop	3
EN-272	News Reporting and Writing I	3
EN-320	Victorian Literature	3
EN-352	Practicum in Journalism	3
EN-353	Narrative Journalism	3
EN-354	Opinion Writing	3
EN-364	Elizabethan and Jacobean Drama	3
EN-370	Antislavery Literature	3
FR-321	Advanced French Composition I	3
GL/BI-202	Principles of Ecology	4
GL/FR-321	Advanced French Composition	3
GL/HI-201	International Relations I	3
GL/HI-202	International Relations II	3
GL/HI-267	US-Latin American Relations	3
GL/PO-201	International Relations I	3
GL/PO-202	International Relations II	3
GL/PS-365	Cultural Psychology	3
GL/SO-425	Global Development	3
GL/UR-290	Gender and the City	3
GS-365	Climate Change Over Earth History	3
GS-370	Lakes & Environmental Change	4
HC-425	Research Seminar	3
HC-450	Practicum: Community Health	3-6
HE-240	Writing and Learning From Experience I	3
HE-440	Practicum in Health	3
HI-201	International Relations I	3
HI-202	International Relations II Globalization	3
HI-203	The United States Since 1945	3
HI-204	History of Science and Technology	3
HI-215	History of American Thought	3
HI-217	US Social History	3
HI-224	English History I	3
HI-225	English History II	3
HI-262	Middle East History II: The Ottoman Empire, 1289-1920	3
HI-267	US-Latin American Relations	3
HI-290	Health and Healing in America	3
HI-320	Citizen Nation	3
HI-345	Religions in America	3
HI-460	Senior Research Seminar in History	3
HI-470	Senior Thesis in History	3
JO-201	Multimedia Journalism	3
LC-293	Peer Mentoring	3
MA-470	Capstone Experience	3
NU-332	Transition to Professional Nursing	3
NU-340	Nursing Science II	9
NU-450	Leadership in Nursing	3
PO-201	International Relations I	3
PO-202	International Relations II: Globalization	3
PO-320	Citizen Nation	3
PS-205	Research Methods	3
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
PS-345	Cognitive Psychology	3
PS-365	Cultural Psychology	3
PY-112	Physics in Art	4
SO-350	Social Stratification	3
SO-425	Global Development	3
SO-435	Introduction to Social Enterprise	3
SP-321	Advanced Spanish Composition I	3
SP-322	Advanced Spanish Composition II	3
UR-212	American Metropolitan Evolution	3
UR-216	Woman and Aging in the Urban Enviroment	3
UR-230	Technology, Public Policy and Urban Society	3
UR-240	Introduction to Qualitative Research Methods for the Social Sciences	3
UR-290	Gender and the City	3
VP-400	Arts Capstone/Senior Thesis	3
WO/CM-213	Gender and the Media	3
WO/HI-217	US Social History	3

WO/HI-320	Citizen Nation	3
WO/PO-320	Citizen Nation	3
WO/UR-212	American Metropolitan Evolution	3
WO/UR-290	Gender and the City	3

Matriculation

Matriculation is the process whereby students are admitted to Worcester State University and pursue a formal course of study leading to a bachelor's degree, second major, certificate, professional certification, or master's degree.

Multicultural Affairs

Alternatives for Individual Development (A.I.D.)

The Alternatives for Individual Development Program (A.I.D.) is an alternative admissions program at Worcester State University which provides educational assistance to students.

The primary focus is the first two years (Freshman and Sophomore years). However, the program requires a minimum participation of four academic semesters designed by the program staff and based on individual assessment. Other services will be provided to students throughout their undergraduate experience, including academic assistance, individualized or group tutoring, assistance with financial problems and cultural enrichment.

The program actively recruits students who show motivation and desire to succeed in higher education. Included in this category are ALANA, low-income, and first-generation students.

To be eligible for the summer program students must be incoming first-year students and meet minimal admissions requirements.

Upward Bound

The Upward Bound Program at Worcester State University is designed to encourage eligible high school students to persist in school through graduation and to seek a post-secondary education.

The Program actively recruits students who show motivation and desire to succeed and who are college bound. Included in these categories are: first-generation, ALANA, and low-income students.

Services include: college visits, workshops and seminars in college admissions and financial aid assistance, career counseling, individualized or group tutoring and cultural enrichment activities.

The Program has two main components—the Saturday component and the summer residential academy.

Program

A program is an approved academic course of study whether it be a major, minor, or concentration.

Major/Minor

Major: Upon or after admission to Worcester State University, and in any case prior to the beginning of the junior year, degree seeking students declare an intent to major in a specific discipline or an approved interdisciplinary area. In general, a major is completed by earning between 30 and 48 credits with a minimum GPA of 2.0. Students may take additional electives in their major if desired. Courses are selected under the direction, and with the approval of the student's faculty advisor in the major.

Declaration: A department and/or an appropriate interdisciplinary committee administering an interdisciplinary major may establish standards for admission of enrolled students into their major and minor programs. The standards are not based solely on any GPA. They may be based on grades earned in prerequisite courses, demonstration of special knowledge and skills through tests, portfolios, interviews, and other relevant criteria. Departments and interdisciplinary major administering committees must have standards approved by the All University Committee. A minimum GPA at variance with Worcester State University's policy may not be used as a standard for retention as a major or minor student within a department and an interdisciplinary program. Transfer credits must be approved by the major department or the corresponding program administering committee.

Minor: Although not required for graduation, a minor may be completed by earning between 18 and 24 credits in a discipline other than the student's major discipline and/or in an interdisciplinary program.

Changing Major or Minor: A student wishing to change a major or minor field of study completes the Declaration/Change of Major/Minor Form at the Office of the Registrar. A request for a change in major or minor must be made in the Fall by mid-October and in the Spring by mid-March. Forms for the declaration or change of a major/minor are available at the Office of the Registrar. A student

wishing to declare/change into Education, Nursing, or Occupational Studies must obtain approval from the Chair of the department.

Registration and Course Information

Pre-registration for returning students is scheduled in the Fall and Spring of each academic year for advance course selection. The order of registration proceeds from seniors to first-year students. Class determination is made at the completion of the Fall semester and at the end of summer sessions. A student's registration is not considered official until all financial obligations are met.

Course Numbering: The 100-level offerings are introductory or survey courses that generally do not require prerequisites. The 200-level courses are intermediate and may require prerequisite courses. The 300-level courses are advanced and require prerequisite courses. The 400-level courses are generally for seniors and include seminars, independent study, and internships. Courses at the 900 level are open only to post-baccalaureate students.

Prerequisites represent an essential body of knowledge and skills necessary for students to succeed at an acceptable level in a course and/or are required to satisfy licensing and certification standards. Specific prerequisites are required for many courses and in certain professional studies leading to licensing and certification. Prerequisites may be waived by the instructor or department chair of the department offering the course.

Corequisites are courses which support the successful completion of certain other courses when taken concurrently. When a corequisite is listed for a course, the students are advised to register for both at the same time. In some cases, prerequisite/corequisite courses may fulfill LASC requirements.

Course Credit is counted in units called semester hours. The number of semester hours carried by a particular course is indicated in the course description. Twelve to 19 semester hours of credit per semester are considered a full-time schedule of study.

Course Overload: Special permission is required for students to register for more than 19 semester hours of credit. Forms are available at the Office of the Registrar and advisor/department and Dean's approval are required.

Course Repeat: Students in academic difficulty who wish to repeat a course must file a course repeat form with the Registrar. Only the higher of the two grades is computed in the cumulative GPA. Students will not receive credit for a course more than one time except for PE100 and MU102, 220, 225 and TH321 and may include departmental special topics courses. Both the old and new grade appear on the transcript. Course repeats must be taken at Worcester State University.

Adding or Dropping a Course: Students may add/drop courses in accordance with the deadline published in the academic calendar. It is the student's responsibility to return the completed form(s) to the Registrar's Office. After the deadline, students wishing to drop a course must follow the procedure for withdrawal.

Withdrawal From Courses (W): A student may withdraw from a course at any point up to one week after failure warnings have been issued. Choosing to withdraw is a serious matter which may affect a student's class standing, full-time status, financial aid, etc. A student considering such a step should seek advice from the instructor or the faculty advisor. To withdraw from a course, a student must obtain a Course Withdrawal Form from the Registrar's Office and follow the prescribed steps. Mere non-attendance at class does not constitute official withdrawal and may result in a failing grade.

In cases of academic dishonesty, the W grade may be reversed.

All "W" grades are permanently recorded on the student's transcript. A student who withdraws from all courses will be considered withdrawn from Worcester State University, and must file a formal intent to withdraw with the Academic Success Center.

Students who receive any form of financial aid or veterans educational benefits should consult with the respective office PRIOR to dropping or withdrawing from a course. Reducing credit hour load may adversely affect eligibility to receive financial aid or veterans educational benefits. In addition, most

private insurance companies require that students be full-time (12 credits or more) to be eligible for coverage.

Quality of achievement is represented by the following letter grades with associated points per semester hour of credit.

Letter Grade	Grade Points
A	4.0 - points per semester hour credit
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0 - no credit, included in calculation of GPA
I	a temporary grade, not computed in GPA
NR	a temporary grade, not computed in GPA
P	pass/fail option; credit, not computed in GPA
F	pass/fail option; no credit, not computed in the GPA
W	withdrawn; no credit, not computed in the GPA
AU	Audit

Grade Point Average (GPA): At the end of each semester (and/or summer session), a semester GPA is calculated by dividing the total number of credits attempted (excluding grades of I, P, F, W) into the sum of the products of points and credits for all courses taken.

A Cumulative Grade Point Average reflecting the entire history of a student's achievement at Worcester State University is also computed. The Cumulative GPA is a major factor in determining class membership, academic standing, and eligibility for academic honors. Only grades earned at Worcester State University or through the Consortium Program are computed in the cumulative GPA.

Audit Procedure Policy: Students electing to audit may attend classes but will not earn grades or be permitted to submit assignments or take examinations. No academic credit is awarded, but the student receives the benefits of course lectures and discussions. Consent of the instructor is required to enroll in a class as an auditor.

Only students who are not matriculated undergraduates at Worcester State University are eligible to audit undergraduate courses. Also ineligible to audit courses are Consortium, CAPS, dual enrollment, and foreign exchange students.

The audit option must be declared at the time of registration. Students cannot switch to credit-bearing status or from credit-bearing to audit status after registration. Audited courses do not count toward load for any purposes (e.g., financial aid, veterans benefits, etc.) The audit will be permanently recorded on the student's transcript.

Pass/Fail: Students may elect up to two courses per semester on a pass/fail basis. Core writing courses and courses within major(s) and minor(s) disciplines may not be taken pass/fail, even when not applied to specific degree requirements. Students must notify the Registrar's Office at least four weeks prior to the last scheduled day of classes if they intend to take a course on a pass/fail basis. Similarly, students deciding to change from pass/fail status to standard grading must notify the Registrar's Office by the same deadline, four weeks before the final day of classes. Once a student decides to change from pass/fail status to standard grading, it is not reversible; the letter grade stands. No more than fifteen (15) hours may be taken on a pass/fail basis. No more than two courses in any given semester may be taken pass/fail.

Independent Study: Independent studies offer motivated students the opportunity to study a topic not covered in the established curriculum. Independent studies can cover specialized topics or focus on unique research. A student may undertake an independent study to explore individual interests and formulate decisions about future career opportunities.

A matriculated student seeking to take an independent study should contact an instructor and work with him or her to prepare a written contract outlining the course content, student

learning outcomes, grading parameters, and suitable credit hours. In general, independent studies will be supervised by a full-time faculty member. Exceptions require permission from the department chair and the appropriate dean. The student is responsible for obtaining all necessary signatures (the professor, department chair, and appropriate dean) and submitting the application to the Registrar no later than the last day of add/drop. One to six hours of credit may be granted for one semester of independent study. No more than twelve hours in independent study may be granted toward the baccalaureate degree.

Directed Study: A directed study is an alternative method of learning required course material which is appropriate only when special circumstances prevent a student from taking a course in the usual manner. Directed studies will be allowed only in rare instances and in a semester in which the course is not otherwise scheduled. Under the direction of a faculty member, the student must meet the same learning outcomes as required in a regularly scheduled course. Directed Studies should not be used for core classes. Directed study applications can be obtained from the Office of the Registrar. Only one course taken by a directed study may be applied toward fulfilling graduation requirements.

A matriculated student seeking to take directed study should contact an instructor and work with him or her to prepare a written contract detailing the course content, student learning outcomes, grading parameters, suitable credit hours, and how the goals of the course will be accomplished within the directed study format. In general, directed studies will be supervised by a full-time faculty member. Exceptions require permission from the department chair and the appropriate dean. The student is responsible for obtaining all necessary signatures (the professor, department chair, and appropriate dean) and submitting the application the Registrar no later than the last day of add/drop. One to three hours of credit may be granted for a directed study.

Incomplete Grades: When circumstances (e.g.: illness) prevent a student from completing a course on time, the student is responsible for requesting an incomplete. The professor may grant an incomplete provided the student had completed a substantial portion of the course requirements. The student must make arrangements with the professor to complete the course within six weeks of the beginning of the next semester. The academic calendar indicates the deadline for resolving incomplete grades from the previous term. If the requirements are not met within the appropriate period, the incomplete will automatically become an "E," and so recorded on the student's permanent record.

An extension of an incomplete for one semester may be granted if circumstances still prevent the student from completing the course. In such cases, the student is responsible for obtaining the approval of the professor, who must notify the Registrar in writing of his/her approval prior to the end of the initial six (6) week period. With regard to the extension of an incomplete grade, the required course work must be completed by the student prior to the beginning of the final examination period of the semester immediately following the one in which the incomplete was originally issued. The instructor will then have five working days within which to submit a final grade to the Registrar.

Change of Grade: Once a grade has been posted to a student's transcript that grade may be changed if, and only if, an error has been made in the calculation or transcription of the original grade. Under no circumstances will a change in grade for a student be allowed because of the submission of additional work after the course has ended. No grade change may be made after the conclusion of the semester following the semester in which the grade was originally submitted.

Standards of Progress

Matriculated students (students admitted to Worcester State University and pursuing a formal course of study leading to the bachelor's degree, second major, certificate, or professional certification) are expected to make satisfactory and steady progress toward completion of their programs.

Opportunities are available for student advisement, both within major departments and from the Academic Success Center. However, each student is solely responsible for selecting courses which satisfy departmental requirements for a major, as well as the general requirements for graduation, as described in this catalog. Students are responsible for familiarizing themselves with this information. Exemption from, or exception to, any published requirement is valid only when approved in writing

by the respective Dean, Provost/Vice President for Academic Affairs, or Associate Vice President for Academic Affairs, and confirmed by the Registrar.

Attendance

All students are expected to attend and participate in all class meetings and laboratory sessions. In the event that illness or some other emergency prevents a student from attending class, the student should contact the instructor directly. Since attendance requirements differ according to the specific academic goals of each course, students should carefully check the attendance policy on the course syllabus. If there is anticipated prolonged absence, the Associate Vice President for Academic Affairs (Administration Building, Room 361) should be contacted.

Worcester State University abides by Chapter 375 of the Commonwealth of Massachusetts, An Act Excusing the Absence of Students for Their Religious Beliefs. Section 2B of this law states: "Any student in an educational or vocational training institution other than a religious or denominational educational or vocational training institution, who is unable, because of his religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day shall be excused from any such examination, study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school. No fees of any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section."

Academic Standing: For degree-seeking students, class membership is based upon the number of credit hours completed. Class membership determines priority for registration and participation in class events.

Class	Credit Hours Completed
First-Year	0-29
Sophomore	30-59
Junior	60-89
Senior	90-120

Good Standing: To maintain good standing at Worcester State University, matriculated students must meet the minimum standards specified below.

College Credits[1]	Cumulative GPA
1-29	1.50
30-59	1.75
60 and over	2.00

[1] College credits include all credits **attempted** at Worcester State University **plus all credits accepted in transfer.** Students are reminded that only grades earned at Worcester State University or through the Consortium Program are used in determining their GPA.

Warning Status: Students will not be placed on probation status until they have attempted 24 semester hours; however, students may be placed on a warning status if they fail to maintain the minimum standard after attempting 12 semester hours. Students on warning status may enroll in no more than 16 semester hours. In consultation with an academic advisor, each such student will develop an academic plan/registration contract that will include such conditions as repeating failed courses, regularly scheduled advising appointments, attending workshops offered through the Academic Success Center, and recommended use of the writing center, math lab, and tutoring services.

Probation and Dismissal: Students who fail to meet and/or maintain the minimum cumulative GPA required for good standing are placed on academic probation and are subject to the following restrictions:

1. they may not participate in intercollegiate athletics; and
2. they may not register for more than 12 semester hours of credit per semester; and
3. they may not serve on any standing and ad hoc governance committees of Worcester State University.

Failure to improve the GPA and regain good standing after two regular academic semesters (Fall and Spring) will result in academic dismissal and separation from Worcester State University. Students dismissed from Worcester State University for academic deficiency may not register for or attend classes at Worcester State University until 12 months have elapsed. Readmitted students must attain a minimum GPA of 2.0 for each semester following their return. Failure to maintain a 2.0 semester GPA will result in a second separation from Worcester State University not subject to appeal. See next section regarding withdrawal/leave of absence.

Appeal of Dismissal: Students may appeal for reinstatement to continue for a third semester on probation. Appeals must be made in writing to the Chair of the Academic Progress Review Board and submitted to the Registrar within five (5) days of notification. The Academic Progress Review Board will review the written appeals. The decision of the Review Board is final.

Transcripts

Official transcripts of coursework taken at Worcester State University may be obtained by eligible students from the Office of the Registrar with the completion of a form available for that purpose, or by written request. Students may also download the transcript request form from the web site (http://www.worcester.edu/transcriptrequest), and forward the completed copy to the Registrar's Office. Requests must include name while attending, current name if different, Social Security number and/or student ID number, last date of attendance and whether or not the student was officially accepted into a program. Transcripts are $5 per copy. Payment must accompany the request in the form of a check made payable to Worcester State University, or credit card information provided on the request form. Transcripts cannot be ordered by telephone or fax.

Undergraduate Grade Appeal Procedure

Prior to invoking the use of the undergraduate grade appeal procedure, individuals should exhaust all informal means available to resolve questions concerning specific issues related to their courses.

The grade appeal procedure may not be used to challenge a grade which results from a faculty member exercising usual and customary professional judgment in the evaluation of student work.

Step 1

When an issue arises in which the student believes he/she has been treated unfairly, the student shall request in writing a meeting with the instructor. In the case of an end-of-semester grade, the student shall request such a meeting no later than ten working days after the beginning of the next semester. The instructor shall arrange to meet with the student within ten working days of the receipt of the request.

Step 2

If the matter is not resolved to the satisfaction of the student at Step 1, then, within ten working days of the meeting in Step 1, the student shall file a written request to review the matter with the appropriate Department Chair.

Step 3

If, within ten working days of the receipt of the request in Step 2, the Department Chair is unable to resolve the matter to the satisfaction of all parties, then either party may, within ten working days, file a written request to review the matter with the Dean of the respective School.

Step 4

If, within ten working days of the receipt of the request in Step 3, the Dean is unable to resolve the matter to the satisfaction of all parties, then either party may, within ten working days, file a written request to review the matter with the Vice President for Academic Affairs. In the case of continuing education courses or graduate courses, the appeal at Step 3 goes to the Associate Vice President of Continuing Education.

Step 5

Within ten working days of the receipt of the request in Step 4, the Provost/Vice President for Academic Affairs shall inform the student, faculty member, Department Chair, Dean of the results of his/her review.

The appeal process ends at this point.

Withdrawal from Worcester State University/Leave of Absence

Matriculated students who fail to take a course during a calendar year will be administratively withdrawn from Worcester State University. Students who wish to permanently withdraw from Worcester State University or take a temporary leave of absence must complete appropriate forms in the Academic Success Center. If the withdrawal or leave of absence is filed prior to the last day to withdraw from courses for the term, "W" will be recorded on the student's record. Students who file for leave of absence or withdrawal after the last day to withdraw from courses for the term may petition if they feel circumstances warrant the recording of "W" for all courses enrolled for that term. Normally, a leave of absence is for one semester; however, a student may have up to one year to return to Worcester State University. Failure to return at the specified time will result in an administrative withdrawal from Worcester State University.

Students who receive any form of financial aid or veteran's educational benefits should consult with the respective office PRIOR to dropping or withdrawing from a course. Reducing credit hour load may adversely affect eligibility to receive financial aid or veteran's educational benefits. In addition, most private insurance companies require that students be full-time (12 credits or more) to be eligible for coverage.

Reinstatement after Withdrawal/ Non-continuous Attendance/ Dismissal

Students reactivate their undergraduate, matriculation status through the Registrar's Office. It is the student's responsibility to supply and update the following documents if they are not on file:

- final high school transcript
- completed and notarized proof of residency form
- official transcript of all courses completed at each post-secondary institution attended (excluding Worcester State University).

When the file is complete, the student will meet with an advisor and develop a plan for academic persistence and success. If applicable, an updated evaluation of transfer credits will be done at this time. In the case of Nursing, Occupational Studies, and Education majors, an interview with the academic department will be necessary to determine reinstatement possibility in these majors.

Students readmitted after dismissal must attain a minimum GPA of 2.0 for each semester following their return. Failure to maintain a 2.0 semester GPA will result in a second separation from Worcester State University not subject to appeal.

All reinstated students follow the major requirements from the catalog in effect at the time of their reactivation. For students who matriculated prior to Fall of 2009 as first-year students, or prior to 2012 as transfer students, courses will be allocated to LASC categories according to the LASC transfer policies (see LASC section under "Academic Policies and Procedures"). For students who last matriculated as first-year students after the Fall of 2009, or as a transfer after the Fall of 2012, all courses completed at WSU will be allocated to LASC categories according to the catalog in effect when he/she is reinstated. Through appropriate advising, a plan for success outlining the maximum credits applicable will be developed prior to the semester of re-matriculation.

Enhanced Learning Opportunities

- Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science (p. 76)
- American Antiquarian Society Seminar (p. 77)
- American Chemical Society (p. 77)
- College Academic Program Sharing (CAPS) (p. 77)
- Department Challenge (p. 77)
- Higher Education Consortium of Central Massachusetts (HECCMA) (p. 77)
- Internships and Professional Experiences (p. 78)
- New England Regional Student Program (p. 78)
- Off-Campus Courses (p. 78)
- Pre-Law Program (p. 78)
- Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program (p. 78)
- Reserve Officer Training Corps (ROTC) (p. 79)
- Summer Programs (p. 81)
- The Washington Center for Internships and Academic Seminars (p. 81)

Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science

Worcester State University (WSU) and Massachusetts College of Pharmacy and Health Science (MCPHS) have a formal affiliation agreement that admits students into an articulated program that begins with three years at WSU in one of three science tracks: Biology, Biotechnology, or Chemistry, and concludes with the three-year accelerated Doctor of Pharmacy program on MCPHS's Worcester or Manchester (NH) campus. After successfully completing the first-year of required coursework in the PharmD program at MCPHS, students will earn a Bachelor of Science degree from WSU. The first three years at WSU offer a blend of liberal arts and sciences that meet both the MCPHS general education curriculum requirements and the specific science track requirements at WSU. MCPHS provides the coursework needed for the student to earn the Bachelor of Science degree from WSU at the end of the first-year of professional study, as well as the professional education required to earn the Doctor of Pharmacy degree at the end of three years at MCPHS.

MCPHS shall accept up to ten (10) qualified WSU students each year into the first-year of the Pharmacy Program. If more than 10 students meet the established requirements and wish to transfer under the terms of this Agreement, the 10 students determined by the MCPHS Worcester/Manchester Pharmacy Admissions Committees to be the best qualified will be assured transfer admission, with the remaining students accepted on a space available basis.

Students who qualify (at the end of three years at WSU) for the Accelerated Pharmacy Program with MCPHS must:

- have at least a 3.5 cumulative grade point average (on a scale of 4.0)
- be full-time students at WSU for the three pre-pharmacy years and follow one of the approved curricula
- have no grades below C (not C-)
- have no course repeats
- have all courses completed at WSU
- obtain a TOEFL score of at least 213 if English is a second language.

****Students taking a reduced load for two or more semesters will be in violation of the terms of the Agreement and may lose their right to enroll in the PharmD program.

****Students who transfer to WSU from another college are not eligible for this program but can apply to MCPHS via the traditional application process.

Students applying to the MCPHS Accelerated Pharmacy Program must:

- Declare by November 1 of their third year at WSU their intent to transfer to MCPHS as a first-year Pharmacy Program student the subsequent Fall term.
- Complete an application to MCPHS via the Pharm CAS System by November 1.

- Notify both the WSU pre-pharmacy advisor and the MCPHS Office of Admission on the Worcester campus by November 1 of their third year at WSU. Students must indicate their first and second choice of MCPHS campus (Worcester or Manchester).
- Send the completed application to the MCPHS Office of Admission on the Worcester campus by February 1 of their third year at WSU.
- Complete a successful pre-admission interview, conducted by MCPHS at the campus to which the student intends to transfer.

American Antiquarian Society Seminar

Each year the American Antiquarian Society and five Worcester Colleges—Assumption College, Clark University, College of the Holy Cross, Worcester Polytechnic Institute and Worcester State—sponsor a research seminar at the Society library. The seminar is conducted by a scholar familiar with the Society's extensive early American History collection, and the seminar topic is related to his or her field of research. Normally, two students are chosen from each of the five colleges to participate. The seminar topic and research methods combine several disciplines, and students from a wide variety of majors have participated in this unusual undergraduate opportunity. Further information is available from the Department of History and Political Science.

American Chemical Society

Students may challenge Chemistry for the Allied Health Professions by contacting the Chemistry Department, New York Board of Regents. In some cases, credit can be awarded for these examinations.

College Academic Program Sharing (CAPS)

A student enrolled at any of the nine Massachusetts State Universities may enroll for up to 30 credits at any other state university without going through formal registration procedures. Credits are automatically transferred to the student's home institution, and the student pays no additional tuition or fees. To take part in the program, degree-seeking students must have attained sophomore status and be in good academic standing at Worcester State. For further information consult the Registrar.

Department Challenge

When appropriate and with the sanction of the faculty advisor, students may request and complete a department-developed examination to translate competencies into credit. A limited number of departments offer this as an option, so consult the appropriate department chair. However, in most cases it is recommended that students explore the CLEP option.

Higher Education Consortium of Central Massachusetts (HECCMA)

Twelve Central Massachusetts colleges, comprise the HECCMA. In addition to cultural activities, interdisciplinary programs, and other opportunities, the Consortium provides a cross-registration service whereby full-time day students of member colleges may register at no additional cost for one course per semester at another campus.

Members of the Consortium, in addition to Worcester State, are Anna Maria College, Assumption College, Becker College, Clark University, College of the Holy Cross, Mass College of Pharmacy and Health Science University, Nichols College, Quinsigamond Community College, Tufts University's Cummings School of Veterinary Medicine, University of Massachusetts Medical School, and Worcester Polytechnic Institute.

Cross registration opportunities (at no additional cost) exist only for matriculated under graduate students taking day courses at one of the member Colleges during the Fall and Spring semesters. Students must be in good academic standing to take advantage of the one course per semester cross-registration option. Student eligibility and course applicability is determined by the Registrar's Office. Further information is posted on the Consortium website — http://www.heccma.org.

Internships and Professional Experiences

Matriculated students in good academic standing are eligible for internship placement if they meet departmental requirements for such placement. No more than 12 academic credits may be applied toward graduation. An internship is a form of experiential learning that permits a Worcester State matriculated student to convert theory into action. An internship may be undertaken with or without the expectation of academic credit. If credit is to be granted, however, the internship must be monitored and evaluated by the appropriate Worcester State department and a grade awarded at its completion. The internship can be constructed according to any of a number of models including professional apprenticeships, work experience, field research, career exploration, socio-political action and service learning. Because students must be actively involved in the development of an internship placement —by developing a resume, preparing necessary correspondence, or being interviewed—they should contact the faculty sponsor in the semester prior to the proposed internship. The internship contract sets forth the responsibilities of each party so that each understands his or her specific role in the educational field experience. Each program is designed to accommodate and articulate the personal goals of the student, the academic goals of the department, and the needs of the participating off-campus organization. Information about available internships is regularly relayed to, and publicized in, appropriate academic departments. The following conditions apply to all internships:

- No more than 12 units of internship credit may count toward a degree.
- Students undertaking internships must be in good academic standing.
- Only juniors and seniors may undertake internships.
- A copy of the student's internship contract with the sponsoring department must be filed with the Registrar's Office.
- Students are responsible for providing their own transportation for off-campus learning experiences.

New England Regional Student Program

Worcester State participates in a regional cooperative program administered by the New England Department of Higher Education. The New England Regional Student Program offers qualified residents the benefits of in-state tuition plus 50% in certain programs at any New England state university, college, two-year college, or technical institute. The purpose of the program is to expand higher educational opportunities for New England residents by making available, on an equal basis, those programs not commonly offered at every institution. Information about the program can be obtained from the Admissions Office, from any guidance counselor, or from the New England Department of Higher Education, 45 Temple Place, Boston, MA 02111.

Off-Campus Courses

Matriculated students may enroll in off-campus courses at regionally accredited institutions in academic disciplines that are compatible with the Worcester State curriculum. To assure applicability and transferability, matriculated students must have approval in writing from their faculty advisor and the Registrar before enrolling in courses at other accredited institutions. Copies of course descriptions from college catalogs or other publications for each course must be attached. Forms are available at the Registrar's Office (Administration Building, Room 107).

Pre-Law Program

Programs of preparation for law school are available through the Department of History and Political Science and the Department of Philosophy.

Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program

Worcester State University offers an advisory program for students interested in preparing for medical, dental, veterinary, or pharmacy studies. Students interested in medicine or dentistry may pursue study in any of the academic majors of Worcester State University. It is the obligation of the students to check with the professional school(s) to

which they intend to apply for exact requirements. Nearly all medical and dental schools require one year each of the following laboratory courses: General Chemistry, Organic Chemistry, Biology, and Physics. In addition, many schools require two years of a modern foreign language, one year of English (including composition), and Mathematics through Calculus. Regardless of major, students are advised to select CH-120 and CH-121, General Chemistry I and II, and either BI-140 and BI-141, or PY-221 and PY-222 or PY-241 and PY-242 in their first-year.

Students interested in medicine, dentistry, veterinary medicine, optometry, podiatry, or osteopathy should consult both the major advisor and the Chair of the Pre-Medical and Pre-Dental Advisory Committee as soon as possible following matriculation. Students are advised to complete their science requirements before the end of their junior year and to take the national pre-professional exam (e.g., MCAT, DAT) during the Spring semester of their junior year. During the junior year, students must arrange an interview with the Pre-Medical and Pre-Dental Advisory Committee. Additional information is available at http://www.worcester.edu/PreMed.

Reserve Officer Training Corps (ROTC)

Air Force

Worcester State students have the opportunity to participate in Air Force ROTC ("AFROTC") through the AFROTC Detachment at Worcester Polytechnic Institute. The AFROTC program is voluntary and open to all students who seek the challenge of being an officer in the United States Air Force upon graduation from college.

Four-Year Program: This traditional program is the more popular choice. The first two years are known as the General Military Course (GMC). Classes meet one hour a week and are required for freshmen and sophomores. There is no military obligation for the first two years of AFROTC unless a student has an AFROTC scholarship. Students who successfully complete the GMC compete nationwide for entry into the Professional Officers Course (POC), which meets three hours a week and is required for juniors and seniors. Officer candidates in the POC (and on scholarship) receive a nontaxable subsistence allowance of up to $500 a month. In addition, qualified officer candidates attend the AFROTC field training program for four weeks between their sophomore and junior years.

Three-Year Program: Students may also choose an accelerated three-year option, which shortens the standard four-year program by condensing the GMC from two years to one. This option gives students the flexibility to begin AFROTC in their sophomore year (or junior year with one year of graduate study).

To participate in AFROTC students must be United States citizens (or naturalized by the end of their sophomore year), of good moral character, and in sound physical condition. Students interested in AFROTC should write to the Professor of Aerospace Studies
AFROTC Detachment 340, Worcester Polytechnic Institute, 37 Institute Road, Worcester, MA 01609-2280, call 508-831-5747 or email afrotc@wpi.edu for further details and the latest information on scholarship opportunities.

Army

The Army Reserve Officers' Training Corps (ROTC), is offered by Worcester Polytechnic Institute and is available to all Worcester State students. American citizens who are physically qualified and who satisfactorily complete the entire four-year program will be commissioned in the United States Army. Graduates serve as second lieutenants in the Active Army or the reserve components. Delayed entry on active service for the purpose of graduate school is available. Military science is designed to complement other instruction offered by Worcester State. Emphasis throughout is on the development of individual leadership abilities and preparation of the student for future important leadership roles in the Army. There are two variations of ROTC available to the student who desires to participate: a four-year program, in which students participate in required military science courses and activities for four academic years. Attendance at a six-week advanced training camp is required between the third and fourth year.

The two-year ROTC program is intended for students in their second year of college who want to enroll in ROTC in their junior year. It begins with a six-week basic summer training camp, with pay, between the sophomore and junior years. Upon successful completion of basic camp, the student participates

in the third year of ROTC and attends the advanced camp during the next summer. As an alternative, an enlisted member of the Army National Guard or Army Reserve who has completed basic training can qualify for the two-year ROTC Simultaneous Membership Program (SMP).

All students enrolled in the last two years of the program receive a tax-free cash stipend of $100 each month in school. Two- and three-year Army ROTC scholarships are available for students who wish to apply. The scholarship is based on the achievements of the applicants, not the financial status of their families. The ROTC scholarship covers tuition and most required fees, paid directly to the college. It also pays directly to the student $450 per year for books and a $100 monthly cash stipend, each month in school. Both are tax free. Members of Army Reserve and National Guard may participate in the ROTC/SMP as college juniors, receiving a reserve officer commission upon successful completion of the military science requirements. SMP cadets remain members of their unit and earn E-5 drill pay in addition to the tax-free stipend of $100 per month through ROTC. Additionally, Massachusetts National Guard ROTC/SMP members receive free tuition at state schools.

Students interested in Army ROTC should contact the Professor of Military Science, Military Science Department, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609, or call 508-831-5268. Offices are located in Room 28A, Harrington Auditorium.

Navy

Programs leading to a commission as an officer in the United States Navy or Marine Corps are available to all qualified Worcester State male and female students through cross-enrollment in the Naval Reserve Officers Training Corps Unit at the College of the Holy Cross. Students can participate as Scholarship or College Program (non-scholarship) students in either a four-year or two-year Naval ROTC ("NROTC") program. The basic qualifications for enrollment in the NROTC Program are United States citizenship, good moral character, and sound physical condition.

High school students, in the Fall of their senior year, can apply through the national competition for three- and four-year NROTC Scholarships. If selected, they receive full tuition, payment of most fees, and a $150 per month tax-free stipend. Along with their college degree requirements, NROTC students are required to complete one Naval Science course each semester and also participate in one two-hour weekly unit drill period. Additionally, scholarship NROTC students participate in summer training cruises after their first-year, sophomore year, and junior year. The summer cruises are four to six weeks in length, with pay and allowances, and afford an opportunity for practical experience and travel. Upon successful completion of the NROTC program, graduates are commissioned ensigns in the Navy or second lieutenants in the Marine Corps and are required to serve at least four years on active duty.

First-year and sophomore students can apply for the two-year NROTC Scholarship Program during their first two years in college. If selected, they receive full tuition, payment of most fees, and a $150 per month tax-free stipend. They attend a six-week indoctrination course during the summer preceding their junior year at the Naval Science Institute at Newport, Rhode Island. Along with their remaining college degree requirements, they are required to complete one Naval Science course each semester and also participate in one two-hour weekly unit drill period during their junior and senior years. They are required to serve at least four years on active duty after commissioning.

Students can also participate as College Program (non-scholarship) students in either the four-year or two-year NROTC Program. Students apply directly to the Professor of Naval Science at the College of the Holy Cross for enrollment. The program provides military uniforms and during the junior and senior years a subsistence allowance of $150 per month. College Program students are required to complete one Naval Science course each semester and also participate in one two-hour weekly unit drill period. They also participate in one summer training cruise preceding their senior year. Once enrolled in the NROTC Program, College Program students are eligible to apply for scholarships based on their academic record and performance in the NROTC Unit. Scholarships of one, two, and three years are available.

Upon successful completion of the program, College Program students are commissioned in the Naval or Marine Corps Reserve and are required to serve at least three years on active duty after commissioning.

For additional information about the NROTC Program, contact the Professor of Naval Science, Naval ROTC Unit, College of the Holy Cross, Worcester, MA 01610-2389; 508-793-2434 or nrotc@holycross.edu.

Summer Programs

Worcester State offers a variety of undergraduate and graduate courses during the summer months. Two six-week sessions, the first beginning in late May and the second beginning in early July, provide intensive enrichment opportunities for students working toward completion of degree requirements or upgrading and enhancing professional skills. The summer schedule is usually available in March. Course listings are available at http://www.worcester.edu/summer.

The Washington Center for Internships and Academic Seminars

Worcester State participates in this internship program that combines experience in public, private, or non-profit sectors in Washington, D.C. with academic learning. The internship provides a unique opportunity to explore career paths while sampling the intellectual and cultural diversity of the nation's capital. This internship must be taken for academic credit, so it is imperative that a student meets with the faculty sponsor within his/her academic major early in the semester prior to the proposed participation.

Interested students should contact Dianne Matos, Assistant Director of Career Services, who is the WSU Campus Liaison for The Washington Center (TWC) for Internships and Academic Seminars. She will explain how the application process works, how credits are applied at WSU and all of the logistics involved in participating in this program. All students who apply to TWC must obtain the approval of the Campus Liaison.

Services for Students

Student Services is a collaboration of varied offices designed to enhance each student's experience at Worcester State University. WSU offers career counseling, provides assistance for students with physical and/or learning disabilities, and presents programs for students who may need additional academic preparation for college success.

- Athletics and Recreation (p. 82)
- Bookstore (p. 82)
- Campus Ministry (p. 83)
- Career Services (p. 83)
- Counseling Services (p. 83)
- Dining Services (p. 84)
- Health Forms and Immunization (p. 84)
- Health Services (p. 85)
- Office of Student Involvement and Leadership Development (p. 86)
- Residence Life and Housing (p. 87)
- Student Accessibility Services (p. 87)
- The Binienda Center for Civic Engagement (p. 87)
- University Police Department (p. 87)
- Veterans Service (p. 88)

Athletics and Recreation

The Athletics and Wellness office is an integral component of Worcester State University's efforts to provide a high-quality, affordable education and supportive environment that promotes the total development of the student. A brand new, state-of-the-art, 101,000 square foot Wellness Center opened in August of 2017. This building provides our students robust intramural and recreational opportunities, while our student-athletes compete in some of the nicest indoor facilities in New England. Employment opportunities for students may also be available in the Wellness and Recreation Center.

The Athletics and Wellness staff provides students with the opportunities to grow and learn through intercollegiate varsity athletics, intramurals, and wellness programs. Participation in these activities fosters physical, mental, leadership, and life skills development, while enhancing self-discipline and sportsmanship qualities.

Worcester State University is a Division III member of the National Collegiate Athletic Association (NCAA) and a proud member of the Massachusetts State Collegiate Athletic Conference (MASCAC). The Lancers also compete as affiliate members in select sports in the Little East Conference (LEC) and the Great Northeast Athletic Conference (GNAC). The University sponsors the varsity sports of baseball, men's and women's basketball, men's and women's cross country, field hockey, football, men's golf, men's ice hockey, men's and women's soccer, softball, women's tennis, men's and women's indoor and outdoor track and field, women's volleyball and women's lacrosse.

For those students interested in competing on a less formal level, Worcester State offers an intramural sports program in such sports as football, basketball, street hockey, dodgeball, softball, soccer and volleyball. Any student who wishes to participate in intramural sports, regardless of ability or past experience, is urged to do so.

The Wellness Center also offers less formal wellness opportunities such as use of the 9,000 square foot DeFeudis Fitness Center, three exercise rooms with daily group exercise classes as well as a golf simulator, smoothie bar and several academic classrooms.

In all of its programs, the Athletics and Wellness office is cognizant of its responsibilities as an educational support component at Worcester State University.

Bookstore

All required course materials for classes are available at the Worcester State University Bookstore located in the Student Center. This full-service bookstore offers new and used textbooks, as well as textbook rental. To make the book selection process for classes easier, please bring a class schedule. The Bookstore also stocks school supplies, specialty books and a wide variety of gifts and clothing imprinted with the Worcester State University logo.

Used Textbooks

The Bookstore stocks many used copies of textbooks, but the supply is limited and they sell quickly. Students should shop early for the best selection of used books.

Rent-A-Text

Students have the option to use Rent-A-Text through the University bookstore saving on average half the price of a new book. Students need to complete the short rental agreement online or at the register in the store. Students must be 18 years of age and provide a valid ID and a credit card as collateral. With Rent-A-Text, students can highlight and write in the book. Normal wear and tear is anticipated. Students can pick up rental textbooks in store or order online and have them shipped to their home.

Textbook Rental Return Policy

Any student who uses the University Bookstore Book Rental Program must abide by the contact he/she signs with the bookstore. All rented textbooks are due back by the rental due date. Students who fail to return books or pay the balance due will have their accounts turned over to a collection agency. In addition, the student will not be eligible to participate in the Textbook Rental Program until he/she settles his/her debt.

Online Purchasing

Textbooks and many general merchandise items are available on the bookstore website at http://www.bkstr.com/worcesterstatestore/home. Students can purchase or rent textbooks by clicking on the textbook tab, picking the proper term and selecting the course and section numbers. Online orders can be picked up at the bookstore or they can be shipped home.

Return Policy

Textbooks are returnable for one week after the first day of the semester, with receipt, provided they are unmarked and are in the purchased condition with all materials intact. General merchandise is returnable at any time with receipt.

Ways to Pay

The bookstore accepts cash, personal checks, MasterCard, Visa, American Express, and Discover, as well as the OneCard. The bookstore also has gift cards available for sale both in store and online.

Book Buy Back

The bookstore will purchase books back at any time, no matter where they were originally purchased, provided there is national demand for the book, as determined by the bookstore's buying guide. The bookstore purchases books back for resale from Worcester State University students at half the new purchase price provided there is a current order and need for the book in the upcoming semester. The best time for students to sell books back is during finals when they are finished with them and the bookstore has the most-up-to-date information on the needs of the upcoming semester.

See bookstore website for hours. Bookstore Online: http://www.bkstr.com/worcesterstatestore/home

Campus Ministry

Campus Ministry at Worcester State University seeks to enable students, faculty and staff to grow spiritually in their faith journey as they work and study at Worcester State. Through interfaith programs, suppers, counseling and fellowship opportunities, Campus Ministry seeks to bring a religious dimension into the everyday life and conversation of the Worcester State community. The Campus Ministry House is located near Dowden Hall and is staffed by chaplains and available clergy from various religious traditions.

Career Services

Career Services provides students with the opportunity to explore career fields and occupations and conduct self-assessment, link career planning to academic planning, obtain experience in a variety of professional areas, and make a successful transition from college to career or to further schooling. We have a wide variety of services and resources available. Please visit our website at http://www.worcester.edu/careerservices, or visit our office and the Career Resource Center on the third floor of the Student Center. Appointments with a Career Counselor are available year round to currently matriculated students. Please call us at 508-929-8072 to make an appointment or if you have any questions. We look forward to serving you.

Counseling Services

The Counseling Center assists students in coping with personal issues that interfere with their academic and personal development and sense of well-being. Individual counseling is available to those who are seeking assistance. Following an initial evaluation, counselors will work with students

to assess the level of services the student needs. This may include weekly, bi-weekly, or monthly appointments and in some cases a referral to community resources. Counselors are available to treat a wide-variety of mental health concerns including, but not limited to trauma, depression and anxiety. Group counseling may also be available on an as needed basis.On our website(worcester.edu/sp-counseling) students can access free online screeenings for a variety of areas. These are available in Spanish,Portuguese, and English.

The Counseling Center provides services to fully matriculated undergraduate students and is located on the third floor of the Student Center. To make a counseling appointment, please call 508-929-8072 or you may email the Counseling Center at counseling_wsu@worcester.edu.

Dining Services

Worcester State University Dining Services is managed by Chartwells. Chartwells is proud to offer a "Pulse on Dining" at Worcester State University. It is an unforgettable dining experience; passion and practicality; ingenuity and sensibility. Great food and exciting environments combined with pride of service transform the ordinary into the unexpected.

Locations and Hours of Operation

There are eight dining locations on campus Sheehan Hall POD, The Food Court, Woo Cafe, Lancer's Loft, LRC Starbucks Café, C-Store, Woo Scoops and Chandler's Juicing & Smoothies in the new Wellness Center. To find out about hours of operations, menus, prices, specials, and upcoming events go to http://www.dineoncampus.com/wsu.

Resident students can choose from block plans of 280 meals, 250 meals, 200 meals, 150 meals and 90 meals. Chartwells also has a mandatory commuter dining dollar plan for all first-year students, sophomore, junior and first-time transfer commuter students. All meal plans only last a semester. To find out more information about meal plans, visit http://www.dineoncampus.com/wsu.

Health Forms and Immunization

Each full-time undergraduate and graduate student, all full and part-time students in health science programs involving patient contact (Nursing, Occupational Studies, and Communication Sciences and Disorders), and all students attending Worcester State University on a student visa must present evidence of immunization in order to register for courses. Massachusetts law specifies the following immunizations:

1. two doses of measles, mumps and rubella vaccine given at least one month apart beginning at or after 12 months of age;
2. one dose of tetanus/diphtheria/pertussis (Tdap) is required, if it has been 5 years or more since the last dose of tetanus/diphtheria (Td);
3. three doses of Hepatitis B vaccine;
4. All newly enrolled full-time resident students must be immunized with the Meningococcal vaccine within the last 5 years or the student/parent/legal guardian may sign the Meningococcal Information and Waiver Form developed by the Massachusetts Department of Public Health; and
5. a history of varicella (chicken Pox) disease verified by a health care provider, or two doses of Varicella vaccine given at least 1 month apart beginning at or after 12 months of age.

A copy of an immunization record from a school or medical provider's office indicating receipt of the required immunizations may be presented; or in the case of measles, mumps, rubella, Hepatitis B, or varicella, laboratory evidence of immunity. The law provides for medical and/or religious exemptions. Provision is also made to allow students to register on condition that the required immunizations are obtained within thirty days of enrollment.

Students must submit the Worcester State University Health and Immunization form, completed by a medical provider, in order to register for courses. In addition to the required immunizations, this form includes a physical exam completed within 15 months of entrance to school, and the completion of the Tuberculosis Risk Screening Questionnaire.

All resident students must have a complete Worcester State University Health Form in order to move into the residence halls.

All students, listed previously, must have a complete Worcester State University Health Form in order to register for classes.

If a student does not have a complete Worcester State University Health Form within 30 days of enrollment, a Health Hold is placed on his/her account, and he/she will not be able to register for classes the next semester.

Contact Information

For additional information regarding the Worcester State University Health and Immunization Form or Health Holds, please contact :

Health Services - Sheehan Hall
508-929-8875
508-929-8075 (fax)
email: kasquith@worcester.edu
Webpage: Health Services

Health Insurance

The Commonwealth of Massachusetts requires that students must be covered by health insurance under their own policy or purchase the Worcester State University health insurance plan. Health insurance is required for undergraduate students if they register for nine (9) or more semester hours of credit. Coverage for graduate students is required if they register for seven (7) or more semester hours of credit.

At the time of Fall and Spring registration, all students will be enrolled in and charged for the Worcester State University Student Health Insurance Program. Students who do not wish to participate in Worcester State University's plan must return the completed waiver request form **that is enclosed with their bill**. They may also waive the insurance online at University Health Plans. Both the completed waiver form and proof of insurance coverage should be returned with payment of their bill to the Bursar's Office. Students who enroll only in summer session courses are not required to participate.

Health Services

Health Services offers health care and health education to currently enrolled full-time/part-time, matriculated, undergraduate students. The office is staffed by nurse practitioners and part-time physicians.

Services

Services include visits for health concerns/illness, health maintenance/wellness information, women's health including routine gynecological exams/ pregnancy issues/contraception, STI screening (male and female), Physical Exams in select situations, Tuberculosis skin testing in select situations, and specialty referral as needed. Information about the student's care will only be shared with the student's written approval, except as required by law, and in cases of danger to the student or others. Students' Health and Immunization Forms remain on file in the Health Services office.

Costs

Most services in Health Services are covered by the Health Services Fee billed with the tuition bill. Any laboratory tests sent out from Health Services are billed to the student's health insurance company. The student is responsible for any additional charges not covered by their health insurance company. Students should call their health insurance company prior to the appointment to determine if they require laboratory specimens to go to a specific laboratory company. The laboratory specimens are sent to Quest Diagnostics Labs. Health Services does not bill your health insurance company for visits to our office or collect co-payments at the time of the office visit.

Location/Hours

The Health Services Office is located in Sheehan Hall. The office has a separate entrance from the main entrance doors of Sheehan Hall. The office entrance is located to the right of the main entrance, down the sidewalk headed toward lower campus.

During the academic year a full-time nurse practitioner, two part-time practitioners, and a part-time physician staff the office.

Office hours during the Academic Year for clinical visits are:

Monday, 8 a.m. - 8 p.m., and
Tuesday - Friday 8 a.m. - 4 p.m.

When Health Services is closed, emergencies are referred to Worcester State University Police, 508-929-8911

Appointments

Appointments can be made either in person or by calling the Office, 508-929-8875. It is best for the student to call as early in the day as possible, to schedule an appointment that is convenient for their schedule.

Contact Information

Health Services
508-929-8875
508-929-8075 (fax)
email: kasquith@worcester.edu
webpage: Health Services

Office of Student Involvement and Leadership Development

The Office of Student Involvement and Leadership Development ("OSILD") is located on the 2nd floor of the Student Center. The purpose of OSILD is to support the goals of Worcester State University by providing a co-curricular program and life skills laboratory. In the past, the Student Center has been referred to many times as the hearthstone or living room of the campus, and in a very real sense, it is the living room of Worcester State University. It is also a laboratory where students have an opportunity to learn and practice leadership programming, management, and interpersonal skills. Much of the diversity and vitality of any student center stems from the involvement of students. The strength of the Student Involvement and Leadership Development Office is the student involvement either through employment or through membership in a student organization. Coupled with their intensive academic program, the co-curricular program allows the student to get the most out of their university experience. Through participation in leadership training, clubs and organizations, and part-time job opportunities, the student benefits by getting real world experience in planning and implementing their own programs. These experiences allow the student to gain valuable life lessons such as time-management and event planning as well as other leadership skills.

Student Organizations

Students are encouraged to participate in at least one co-curricular activity during their time at WSU. There are over 35 active student organizations on campus including groups such as Student Events Committee, Third World Alliance, Student Government/Student Senate, Equestrian team, Dance Team, Dance Company, Active Minds, Enactus, WSUR Radio, Pride Alliance, Campus Ambassadors, Surreal and Science Fiction Club, Cheerleading and Men's Lacrosse and many others. Leadership training is also provided and encouraged for all members of student organizations to improve their leadership skills and prepare for life after WSU. For more information check out our Student Organization page.

Student Center

The centrally located Student Center is both the heart of campus and the hub for student involvement, and students gravitate here to relax, socialize, study, work, attend meetings and events, and grab a bite to eat. The Student Center is home to a wide range of student services as well as the Information Desk, Print Center, Bookstore, student organizations, living room lounge, and administrative offices. For more information regarding the Student Center check out our Student Center page. OSILD hires up to 40 students per year in the various work areas within the Student Center. Hiring is done at the end of April each year in areas such as the Information Desk, Print Center, Living Room, Student Managers, Office Staff and Program Assistants.

Commuters

OSILD also provides many opportunities for commuters to get involved on campus. Commuter Services staff is dedicated to assisting students and serves as an advocate for commuter concerns. Students are welcome to contact Commuter Services to express any concerns that you may encounter as a commuter student at WSU. The office works in conjunction with the Commuter Advisory Board to support commuter students in addressing such concerns.. The Commuter Advisory Board ("CAB") is a major student organization supporting the

voice of commuter students and plans fun and educational events for the entire campus community with particular emphasis on commuter students.

Orientation

The Orientation Program also resides with the OSILD office. This includes planning and implementing first-year student, parent and transfer orientations throughout the year and employs 28 students as Orientation Leaders.

Contact Us:

Email: studentinvolvement@worcester.edu
Phone: 508-929-8073

Residence Life and Housing

Mission

Residence Life and Housing is committed to providing inclusive living and learning experiences that enhance our residents' engagement in their own development and academic success. Students may choose to live in one of four residence halls on campus: Chandler Village, Dowden Hall, Sheehan Hall or Wasylean Hall.

Residence Life and Housing
101 Sheehan Hall
508-929-8074
reslife@worcester.edu

http://www.worcester.edu/myhousing
http://www.woolife.worcester.edu

Student Accessibility Services

Student Accessibility Services (SAS) collaborates with and empowers students who have disabilities in order to coordinate support services and programs that enable equal access to an education and university life. The SAS strives to assist students with disabilities in advocating for themselves, receiving reasonable accommodations, and utilizing campus-wide resources in order to fulfill their postsecondary education goals. SAS provides a welcoming, supportive and engaging setting for students, and promotes disability as an essential aspect of diversity on campus.

Accommodations and services are individually determined through an intake appointment. Please see our website: www.worcester.edu/Sudent-Accessiblity-Services for documentation guidelines. For further information, contact us: Room 131, Shaughnessy Admistration Building, telephone: 508-929-8733, fax: 508-929-8214, email: sas@worcester.edu.

The Binienda Center for Civic Engagement

The Binienda Center for Civic Engagement was established in the Spring of 2006 by a group of distinguished faculty at Worcester State University. Currently located in the Office of Student Involvement and Leadership Development (Student Center room 206) the mission of the Center is to challenge students and faculty to investigate social problems by examining their root causes in the classroom while simultaneously addressing them in the community. To accomplish this successfully, students and faculty are encouraged to work collaboratively with community partners to design effective research and service projects. We facilitate projects such as Jumpstart, a pre-school literacy program, alternative spring break trips, and other reciprocal partnerships with public, private and non-profit organizations in communities to address critical social issues. The hope of our civic engagement projects is that higher education institutions engender students' civic learning through participation in civic engagement, academic coursework, extracurricular activities and off-campus programming. The goal of civic learning and civic engagement is to prepare individuals for effective democratic participation, which in turn promotes growth of healthy communities, global economic vitality, social and political well being, and positive human interactions.
Faculty, staff, students and community partners needing support in civic learning and engagement practices are invited to contact Mariel Montanez at 508-929-8073 or Dr. Mark Wagner at 508-929-8635 or at WSU_BiniendaCenter@worcester.edu

University Police Department

The Worcester State University Police Department's main priority is to provide the safest and most secure environment possible for the students, faculty, staff and visitors that comprise the institution's

community. WSU believes that safety is everyone's responsibility and encourage students, faculty and staff to engage in community policing and to report any suspicious activity to Worcester State University Police. Policing is provided 24-hours a day throughout the calendar year by a full-time staff of sixteen sworn officers and three residence hall desk assistants. Worcester State University Police officers enforce the rules and regulations of Worcester State University in conjunction with applicable state and federal laws. The department also provides crime prevention programs and seminars scheduled at intervals throughout the year as well as ad hoc programs when requested by any constituent of the Worcester State University community. The Worcester State University Police and The Office of Transportation and Parking Clerk's offices are located on the first floor of Wasylean Hall. The University Police may be reached by visiting http://www.worcester.edu/police or by calling 508-929-8911.

Veterans Service

Worcester State University proudly welcomes student veterans. Veteran's have provided a noble and crucial service, and for that, Worcester State thanks you. Worcester State is committed to helping veterans meet their educational needs by providing information, services, and support.

Certifying Official for Veterans Benefits

The Certifying Office for Veterans Benefits, which handles all aspects of Chapter 33, the Post-9/11 Bill, and the Montgomery GI bill, contact at WSU is:

Cherie Milosh, Certifying Official
(cmilosh@worcester.edu)
Registrar's Office, Administration Building, Room 107,
508-929-8773

The Registrar's Office can also provide general information of interest to veterans and dependents of veterans enrolled at WSU. Spouses and dependents of 100 percent disabled or deceased veterans wishing to inquire about possible veterans' benefits should contact the Registrar's Office.

Director of Veteran Services

Once a veteran has been accepted to WSU, and the benefits are certified, the Office of Veterans Services will assist in the transition to the academic environment. On-campus and off-campus resources are available and coordinated through this office. The aim is to ensure that veterans are successful in completing the requirements as degree seeking students. With questions, please contact Alan Jackson (ajackson@worcester.edu) in the Student Center, 3rd Floor, 508-929-8884.

Financial Information

- Affordability/Accessibility Disclosure Statement (p. 89)
- Evening Undergraduate, Graduate, and Summer Programs (p. 89)
- General Worcester State Refund Policy (p. 90)
- Return of Title IV Funds (p. 90)
- Room and Board (p. 91)
- Student Health Insurance (p. 91)
- Tuition and Fees (p. 92)
- Tuition Surcharge (p. 93)
- Undergraduate State-supported Programs (p. 93)

Affordability/Accessibility Disclosure Statement

Worcester State University Affordability/Accessibility Disclosure Statement 2017 - 2018

Annual Department of Higher Education Affordability/Accessibility Disclosure Statement

The schedule of fees, tuition, methods of payment and refund policies are those in effect at the time of publication. They are subject to change without notice.

One of the benefits of being part of public higher education in Massachusetts is the substantial subsidy students receive to enroll in Worcester State. The annual cost information below is provided about the "average" student as a way of showing the amount of this subsidy.

Full Operating Cost (per full-time student)	$ 20,660
Less: State Operating Subsidy	($7,271)
= Tuition and Mandatory Fees (based on 30 credit hours)	$13,389
Add: Average Residence Hall Fees	$11,860
= Cost of Attendance Estimate	*$25,249*
Annual Aid Available to Students	
Less: Average Annual Student Financial Aid	($10,331)
= Net Direct Price to Student	*$14,918*

Evening Undergraduate, Graduate, and Summer Programs

Tuition for undergraduate courses is currently $130 per semester hour of credit. Tuition for graduate courses is currently $169 per semester hour of credit. Tuition is payable at the time of registration and may be made by bank check, money order, personal check, or credit card (MasterCard, Visa or Discover); cash will not be accepted.

Fees are charged and payable when and as applicable:

General Fee (Undergraduate)	$125.00 - per credit
General Fee (Graduate)	$ 126.50 - per credit
Capital Improvement Fee	$26.50 - per credit
Transcript	$5.00 - per copy
Rush Transcript	$10.00 - per copy
Laboratory Instruction	$90.00 - per course
Nursing Clinical	$320.00 - per course
Field Work Supervision/ Internship/Teacher Education Practicum	$15.00 - per credit

Tuition and fee charges are subject to change by the Board of Trustees.

Course Cancellation/Processing of Tuition Refunds

Worcester State reserves the right to cancel any course for which there is insufficient enrollment. Students may transfer to another course by completing appropriate forms in the Registrar's Office. Processing of tuition refunds takes two to four weeks. Refunds are sent to the student at the address of record.

General Worcester State Refund Policy

Applicability

This refund policy applies to all full- and part-time students enrolled in regularly scheduled courses at Worcester State other than those attending Worcester State for the first time (in the current academic year) and receiving financial aid. This policy applies to all tuition, room, board, fees, and other standard billed charges.

Withdrawal Requirements

All matriculated students, undergraduate and graduate, who wish to withdraw from Worcester State must do so in writing to the Registrar's Office on the prescribed form. The official date of withdrawal is that on which the completed form is received and stamped by the Registrar.

All withdrawals from courses — rather than withdrawal from Worcester State entirely — must be done in writing to the Registrar's Office, following the procedures established for that purpose.

Refund Policy

Refunds for withdrawal from Worcester State or withdrawal from courses will be made based on the following schedule if official notice of withdrawal has been received in writing and certified by the Registrar.

1. Prior to the first day of classes, or within the official add/drop period
   - Full refund of all tuitions and fees paid

2. After the official add/drop period
   - No refund of any tuitions or fees paid (unless registration is cancelled by Worcester State)

3. Room Charge (if applicable)
   - A full refund of room fees, less the $150 room reservation deposit will be made if intention to withdraw is received by the Director of Housing in writing at least 30 days prior to the beginning of the semester, **and Worcester State is able to fill the vacancy thus created.**
   - A pro-rata refund of room fees will be made if intention to withdraw is received by the Director of Housing in writing prior to November 1st (Fall semester) or April 1st (Spring semester), **and Worcester State is able to fill the vacancy thus created.**
   - The Housing Contract is for the term of one (1) full academic year, unless otherwise specified in writing. To terminate this agreement, for any reason other than terminating his/her status as a student of Worcester State, a student must petition for release with the Director of Residence Life. Such release is not guaranteed, **and Worcester State reserves the right to deny requests to terminate or cancel the agreement.**

Return of Title IV Funds

Refund Policy for Students Who Receive Federal Financial Aid

Applicability

This refund policy applies only to all full- and part-time students enrolled in regularly scheduled courses at Worcester State who are receiving Federal Title IV Financial Aid.

This policy is mandated by federal regulation.

Withdrawal Requirements

All matriculated students, undergraduate and graduate, who wish to withdraw from Worcester State must do so in writing to the Registrar's Office on the prescribed form. The official date of withdrawal for this refund policy is the date that the student begins the official withdrawal process or the date that the student officially notifies Worcester State of his or her intent to withdraw.

Refund Policy

Refund of Federal Title IV Financial Aid will be based on the date a student completely withdraws from Worcester State as described above. During the first 60% of the semester or summer term a student earns Title IV funds in direct proportion to the length of time he or she remained enrolled. A student who remains enrolled beyond the 60% point earns all aid for the semester or summer term.

The percentage of the semester or summer term that a student remains enrolled is derived by dividing the number of days a student remains in attendance by

the number of days in a semester. Calendar days are used but breaks of at least five days are excluded from both the numerator and the denominator.

Unearned Federal Title IV aid other than Federal Work-Study must be repaid in the following order:

Federal Unsubsidized Stafford Loan
Federal Subsidized Stafford Loan
Federal Perkins Loan
Federal Parent Loan
Federal Pell Grant
Federal Supplemental Educational Opportunity Grant
Other Title IV programs

Students must repay 100% of unearned loans according to the terms of their Promissory Note. Only 50% of unearned grants must be repaid within 30 days of withdrawal from Worcester State

The schedule of fees, tuition, methods of payment and refund policies are those in effect at the time of publication. They are subject to change without notice.

Room and Board

Students admitted to Worcester State as resident students will be notified by the Director of Admissions. The information will be made available to the Residence Life Staff and subsequent correspondence regarding residence hall assignments should be sent to the Office of Residence Life and Housing. First-year residents, including first-year transfer students, are not permitted to have cars on campus.

Housing is guaranteed ONLY for the specified academic year for which a student signs an occupancy agreement.

Students residing in campus housing are assessed a room fee and a food service fee each semester. All students residing on campus are required to purchase a food service plan for the academic year. Upon acceptance, each resident student must pay a $150 non-refundable room deposit and a $100 damage deposit:

For First-Year and Transfer Students:

1. A separate check for $150 (non-refundable) must be submitted to the Admissions Office. Payment of this deposit and the resident's receipt of an agreement signed by Worcester State will reserve a space for occupancy; half of the deposit is applied to the room charge for each semester.
2. The $100 damage deposit will be billed with room rent.

For Returning Residents:

1. A $150 room deposit (non-refundable) along with a signed License Agreement Form must be submitted at the time of room selection for the following year; half of the deposit is applied to the room charge for each semester.
2. The $100 damage deposit will be billed with room rent.

Food Service Plan

The food service plan is a board plan that permits the user to purchase a specific number of meals per semester. Resident first-year students, sophomores, juniors, resident transfer students, and students residing in Dowden Hall are required to be on the full board plan. These plans were designed to meet the needs of those students who plan to eat all their meals on campus. All other residents are required to purchase one of three block plans. The food service is available to meet with students to develop an appropriate food service plan. These plans are also available for commuter students.

Waiting List Procedure

First-year and transfer students may submit to the Admissions Office a $150 room deposit to be considered for room assignment. All other students may submit to the Residence Hall Office a $150 room deposit along with a signed License Agreement Form to be considered for room assignment. Students' names will be placed on a waiting list until a room becomes available; assignments will be made on a first-come, first-served basis.

Student Health Insurance

Undergraduate degree seeking students enrolled in nine (9) or more credits per semester, and graduate degree seeking students enrolled in seven (7) or more credits per semester are required by State regulation to carry individual health insurance coverage. Students without such coverage will be billed a

health insurance premium (currently $2,755 per year) for mandatory enrollment. Students who already have appropriate coverage must complete a waiver of insurance at the time of payment (before the first day of classes) in order to waive the mandatory insurance premium. Any student not completing a waiver will be billed for insurance. This charge may not be adjusted, and is non-refundable after the add/drop period.

Tuition and Fees

Tuition and fee schedules are presented separately for undergraduate day programs, and evening undergraduate, graduate and summer programs. Certain students may be eligible for tuition waivers. Information about eligibility requirements can be found in the section on financial aid.

Tuition and Fees – Fall 2017/2018

Undergraduate Day Division[1]	Annual	Per Semester	Per Cr. Hour
Cost for Full-Time In-State Student	$9,532.00	$4,766.00	$397.17
Tuition:			
MA Resident	$970.00	$485.00	$40.42
Non-Resident	$7,050.00	$3,525.00	$293.75
N.E. Regional	$1,455.00	$727.50	$60.63
Fees:			
General Fee	$7,744.00	$3,872.00	$322.67
Student Activity Fee	$72.00	$36.00	$3.00
Student Health Services Fee	$110.00	$55.00	$4.58
Capital Improvement Fee	$636.00	$318.00	$26.50
Total Fees	$8,562.00	$4,281.00	$356.75
Residence Halls:			
Residence Hall Fee			
Chandler Village	$7,946.00	$3,973.00	
Dowden Hall	$7,646.00	$3,823.00	
Single (Additional charge)	$400.00	$200.00	
Wasylean Hall	$8,346.00	$4,173.00	
Sheehan Hall	$8,166.00	$4,083.00	
Residence Activity Fee	$50.00	$25.00	
Technology and Equipment Fee	$220.00	$110.00	
Resident Parking Fee - satallite lot	$100.00	$50.00	
Board Plans			
Bronze 90 Sem/350 Dining Dollars	$3,750.00	$1,875.00	
Silver 150 Sem/200 Dining Dollars	$3,780.00	$1,890.00	
Gold 200 Sem/150 Dining Dollars	$3,800.00	$1,900.00	
Platinum 280 Sem/100 Dining Dollars	$3,850.00	$1,925.00	
Grand 250 Sem/400 Dining Dollars	$3,990.00	$1,995.00	
Damage Deposit (1st Semester)		$100.00	
Other:			
Health Insurance	$2,755.00	na	
Orientation Fee (New Students)	$75.00	na	
Commuter Meal Plan	$300.00	$150.00	

Division of Graduate and Continuing Education

	Annual	Per Semester	Per Cr. Hour
Tuition:			
Undergraduate[2]			$130.00
Graduate			$169.00
Fees:			
Adminstrative Fee			
Undergraduate			$125.00
Graduate			$126.50
Capital Improvement Fee			$26.50
Other:			
Student Teaching		$75.00 per course	
Lab Instruction		$90.00 per course	
Art Model Fee		$25.00 per course	
Applied Music Fee		$260.00 per course	
Application Fee		$50.00 per item	
Transcript Fee		$5.00 per item	
Field Work Supervision			$15.00
Internship			$15.00

1 Undergraduate Day division courses are offered M-F, 8 a.m. - 4 p.m.

2 Undergraduate courses in the Division of Continuing Education begin at 4 p.m. M - F, Sat/Sun, and on-line

Tuition Surcharge

Students enrolled in credits that result in course registration in excess of 118% of academic degree program requirements will be assessed a tuition surcharge. These students are required to pay a surcharge of $235 per credit hour in excess of the 118% limit. Transfer and continuing education credits are not included in total credit hour when determining who will be assessed the surcharge.

Undergraduate State-supported Programs

In addition to the non-refundable application fee of $50 for Commonwealth residents, $50 for nonresidents, students must upon acceptance pay a $75 non-refundable tuition deposit that will be credited towards tuition upon matriculation and an orientation fee for $75. Students are billed for all semester charges following completion of registration.

Payment may be made by check, money order, or credit card (MasterCard, Visa, Discover, American Express). If payment is made by check, the cancelled check will serve as the student's receipt. If a student remits payment with a check that is returned because of insufficient funds, he or she must make any future payments to Worcester State in the form of a certified check, bank check, or money order. **A returned check fee of $25 will be imposed for each instance of a personal check in payment of any Worcester State charge that is returned not honored.** Students will incur all collection fees if Worcester State must place their accounts with a collection agency and with the Commonwealth of Massachusetts for intercept of other State payments (tax refunds, etc.).

Monthly payment plans through external agencies are available for families who wish to avoid a large outlay of cash at the beginning of each semester. For further information, contact the Student Accounts office.

Non-Payment Reinstatement Policy

Payment in full is required by the due date specified on the student bill. Students whose accounts are not paid in full will be subject to cancellation of class enrollment. Students who have not paid their bill in full will receive a non-payment registration hold. Further, if the account remains unpaid after the add/drop period, the Blackboard access will be suspended until paid along with a $75.00 reinstatement fee.

If after the suspension period, the account remains unpaid, the entire student schedule will be deleted and reinstatement into those courses will not be allowed.

Tuition and fees are subject to change by vote of the Legislature, Department of Higher Education, or Board of Trustees.

Financial Aid

General Information

All students are encouraged to apply for financial aid to help them meet their educational costs. To receive financial assistance from the University, students must be enrolled in a degree-granting or federally-approved certification program at Worcester State University. Second-degree students are eligible for Federal Loans and graduate students are eligible for Federal Loans and Federal Work Study funds. Applicants must also meet all Federal eligibility requirements and must be in good academic standing.

Financial aid is awarded to students with demonstrated financial need. Need is the difference between the total cost of college attendance (including reasonable costs for room, board, books, transportation, and other personal expenses) and the expected family contribution. Non-need based financial aid is available through several loan programs.

Complete information on financial aid programs, application procedures, and the award process is available on the Financial Aid Office website at http://www.worcester.edu/financialaid. Applicants to the University, current students, and their families should feel free to contact the Financial Aid Office at 508-929-8056.

Academic Scholarships for Returning Students

Donor funded academic scholarships are available to undergraduate students at Worcester State University who take the initiative to apply and meet the eligibility criteria. These scholarships are available to a wide variety of class years, majors, backgrounds, and interests, as well as varying levels of academic success and financial need. Applications are accepted annually shortly after January 1st, until April 15th. Students are required to apply online. Details are available at http://www.worcester.edu/scholarships.

Application Process

All students applying for financial aid must complete and submit a Free Application for Federal Student Aid (FAFSA). Priority for financial aid is given to students who comply with the deadlines listed below. Please note that funding from the Federal Pell Grant and Federal Direct Loan programs is available to all late applicants who qualify.

All applicants are encouraged to apply for any scholarship assistance awarded by the state in which they legally reside. Students are urged to contact the appropriate agency in their home state for further information.

Financial aid is not automatically renewable. A new application for financial aid must be submitted for each academic year.

Federal Grants and Benefits

Federal Pell Grant

The Federal Pell Grant is available to undergraduate students enrolled in a degree program who do not already have a bachelor's degree. For the 2017-2018 academic year, Pell Grants range from $606 to $5,920. All eligible students will receive the Federal Pell Grant amount to which they are entitled.

Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a federal grant administered by the University. These Grants are limited to undergraduate students who do not already have a bachelor's degree. Priority is given to students with exceptional need and to Pell Grant recipients. SEOG awards are determined by the Financial Aid Office.

Veterans Benefits

The Veterans Administration has approved Worcester State University for the purpose of providing Veteran's Educational Benefits to veterans pursuing undergraduate and graduate study. Massachusetts veterans entitled to educational benefits must provide the Registrar's Office with a copy of their Form DD-214. Upon receipt of this certificate and the veteran's application, the University will prepare a notice of enrollment and notify the Veterans Administration to determine eligibility for, and initiate payments to the student. Questions concerning veteran's benefits should be directed to the Office of the Registrar.

Financial Aid Application Deadlines

March 1

- priority date for filing the Free Application for Federal Student Aid (FAFSA). All students who wish to be considered for financial aid, must file the FAFSA.

May 1

- deadline for applying for the MASSGrant.
- deadline for on-time consideration for financial aid for students entering in the upcoming Fall

Late applications will be considered subject to the availability of funds.

November 1

- deadline for on-time consideration for financial aid for students entering in the upcoming Spring

Grants and Waivers for Massachusetts Residents

MassGrant Program

The MASSGrant Program is administered and awards are made by the Office of Student Financial Assistance under the MA Department of Higher Education. Scholarship eligibility is verified by the Financial Aid Office. For the 2017-2018 academic year, scholarship awards at Worcester State University range from $600 to $1,400. Application is made by completing the FAFSA. Massachusetts residents applying for financial aid who will enroll full-time must apply for MASSGrant by May 1. MASSGrant eligibility is limited to eight semesters.

Worcester State University Need-Based Tuition Waiver and Massachusetts Cash Grant Program

Full and partial need-based tuition waivers are awarded to selected students who demonstrate financial need and who are:

- undergraduate students
- in good academic standing
- legal residents of Massachusetts.

Waivers may not exceed a semester's tuition charge and other waivers and/or tuition remissions for which a student is eligible will be deducted from the tuition charged before the need-based tuition waiver amount is determined. Award amounts are determined by the Financial Aid Office.

Massachusetts Cash Grant is awarded based on need and cannot exceed tuition and fees. Award amounts are determined by the Financial Aid Office.

Categorical Tuition Waivers

Worcester State University students may be considered for tuition waivers based on the following designations (contact the Bursar about providing documentation of eligibility):

Veterans Tuition Waiver: As provided in M.G.L. Chapter 4, Section 7(43) including: Spanish War, World War I, World War II, Korean, Vietnam, Lebanese Peace Keeping Force, Granada Rescue Mission, the Panamanian Intervention Force, or the Persian Gulf.

For purposes of tuition waivers, the term "veteran" shall also include any individual who served in the Army, Navy, Marine Corps, Coast Guard or Air Force of the United States for not less than ninety days at least one of which was served in the theatre of operation for the Somalian mission known as "Operation Restore Hope" and whose last discharge or release was under honorable conditions.

Native American Tuition Waiver: Available and certified by the Bureau of Indian Affairs.

Senior Citizen Tuition Waiver: Available for persons over the age of 60.

Armed Forces Tuition Waiver: Available for an active member of the Armed Forces including Army, Navy, Air Force, or Coast Guard stationed and residing in Massachusetts.

Clients of the Massachusetts Rehabilitation Commission or Commission for the Blind: Available as certified by the respective commission.

John and Abigail Adams Scholarship Program: Awards non-need-based state-supported undergraduate tuition waivers to students who are awarded John and Abigail Adams Scholarship by the Department of Education. Completion of a FAFSA, continuous full-time enrollment at a state college or university, and a 3.0 are required.

Mass Transfer Program: Available to students who have completed an associate degree at a public community college under the Mass Transfer Program. The waiver is equal to 100% of the resident tuition rate at Worcester State University for the two years of a student's enrollment immediately following their community college enrollment. A 3.0 GPA is required for renewal of the waiver.

Department of Social Services Adopted Children Tuition Waiver: This tuition waiver encompasses 100% of tuition for state-supported courses at all of the Massachusetts public institutions of higher education, excluding graduate courses. Eligible students include all students in the custody of the Department of Social Services adopted by eligible Massachusetts' residents through the Department of Social Services. Students must be twenty-four (24) or under. The Department of Social Services will provide certification of eligibility for the waiver; please contact them for further information.

Department of Social Services Foster Care Tuition Waiver: This tuition waiver encompasses 100% of tuition for state-supported courses at all of the Massachusetts public institutions of higher education, excluding graduate course. Eligible students include all students in the custody of the Department of Social Services placed in foster care with eligible Massachusetts' residents through the Department of Social Services. Students must be twenty-four (24) or under. The Department of Social Services will provide certification of eligibility for the waiver; please contact them for further information.

Massachusetts National Guard Scholarships: Members of the Massachusetts Army or Air National Guard Office Recruitment Program are eligible for 100% tuition remission. Eligibility must be renewed after each 30 credits attempted. Contact the Massachusetts National Guard or the Registrar's Office to speak to the Veteran's Representative for more information.

State Employees' Tuition Remission: State Employees and their dependents that elect to take courses at Worcester State University may have some or all of their tuition waived. Documentation of eligibility should be submitted to the Bursar's Office. Eligible persons should contact the Personnel Office at their place of employment for further details.

Army/Navy/Air Force ROTC Scholarship Programs: The ROTC Scholarship is designed to offer financial assistance to outstanding students in the four year programs. Normally, the award is made prior to the student's first-year of college; however, a student may enter the program in their first-year. Recipients are required to serve on active duty in the branch of the Service they have elected for a period of four years, and then in the active reserve. Contact the ROTC Office at the College of the Holy Cross or Worcester Polytechnic Institute for further information.

Merit Scholarships for Entering Students

Worcester State University recognizes superior academic achievement by awarding a number of academic scholarships to incoming first-year and transfer students. Merit Scholarships can provide up to full in-state tuition and fees and are awarded for a full academic year. They are renewable for full-time students who maintain specific requirements as outlined in the scholarship award letter. Applying for admission to WSU automatically constitutes consideration for these scholarships. No additional application is required. A limited number of merit scholarships are available and students must meet minimum academic standards in order to be eligible. Meeting minimum academic standards does not guarantee the awarding of a merit scholarship. Additional factors beyond a student's GPA and SAT scores are considered in the selection process.

Sources of Financial Aid

Worcester State University has numerous financial aid programs available to assist students in meeting college costs. Funding for these programs comes from federal, state, institutional and private sources. Types of programs include grants, scholarships, waivers, loans, and employment. Please go to http://

www.studentaid.ed.gov for more information on federal aid and http://www.osfa.mass.edu for more information on state aid.

Student and Parent Loans

Federal Direct Loans

The Federal Direct Loan Program is a federal loan program designed to help a student pay expenses at institutions of post-secondary education. All Federal Direct Loan applicants must demonstrate financial need in order to qualify for a subsidized loan. A student with no need or partial need may be eligible for an unsubsidized loan. A Free Application for Federal Student Aid (FAFSA) must be completed before a Federal Subsidized and/or Unsubsidized Direct Loan can be processed. The interest rate for Federal Direct Loans is variable but will not exceed 8.25%. The interest rate is adjusted each year on July 1. The repayment period for Federal Direct Loans begins six months after the student/borrower is graduated, ceases to be at least a half-time student or withdraws from school.

- **Dependent/Independent undergraduates** can receive subsidized Direct Loans up to: 1) Students who have completed 1-29 credit hours of study are eligible for $3,500, 2) Students who have completed 30-59 credit hours of study are eligible for $4,500, 3) Students who have completed 60 or more credit hours of study are eligible for $5,500. Also, all students are eligible for up to $2,000 in additional unsubsidized Direct Loans.
- **Independent students** and dependent students whose parents are unable to obtain a PLUS loan can borrow additional amounts from the Unsubsidized Federal Direct Loan Program, in the amount of $4,000 for their first and second years of study and $5,000 for their third and fourth year.
- **Graduate students** can borrow up to $20,500 from the Unsubsidized Federal Direct Loan Program if their cost of education warrants these amounts.

Direct Loan borrowers should go to http://www.studentloans.gov for specific information on repayment, deferment, cancellation and default provisions.

Federal Parent Loan to Undergraduate students (PLUS)

This loan enables parents of dependent undergraduates to borrow for their dependent's education. A FAFSA is required to receive a Federal Plus Loan. Repayment of this loan begins within 60 days of the date that the loan is disbursed. However, parents may apply for a deferment through their servicer. The interest rate is variable, adjusted annually, not to exceed 9%. Parents may borrow up to the cost of attendance annually, less any financial aid awarded to the student. Parents can apply for PLUS loans and get specific information on repayment, deferment, cancellation and default provisions at http://www.studentloans.gov.

Private Education Loans

Private education loans may be available to assist students who have received the maximum financial aid award(s) allowed through grants, workstudy, and loans but still have remaining University expenses.

Students may search online for more information regarding private education options.

Student Employment

Federal Work-Study Program

The Federal Work-Study Program (FWSP) is a need-based program that provides federally subsidized employment opportunities on campus for enrolled students. A student's financial aid award letter indicates the FWS award and maximum earnings limit, typically $1,500, depending on availability of funds and individual need. Students are paid only for hours actually worked. The FWSP wage rate is variable depending on placement. FWSP earnings are not applied directly to the student's tuition account without the student's written consent. These wages are paid directly to the student. Students employed under the FWSP Program are not eligible for unemployment compensation benefits or worker's compensation for on-the-job accidents. Students are encouraged to participate in employment that complements and reinforces their educational goals.

Other On-Campus Employment

Some departments on campus—including the Student Center, the bookstore, the campus food · service contractor, the Learning Resource Center,

and the Residence Life Office—offer part-time jobs to students. Contact the department(s) for information on possible openings and application procedures. Students are encouraged to see if they qualify for FWSP funding before applying for these jobs.

Tuition Payment Plan

Worcester State University offers an interest-free payment plan administered through Nelnet. Payments start before a semester begins, so please apply early. You may contact Nelnet directly at 800-609-8056 or sign up online at http://www.nbspayments.com.

Academic Calendar

FALL 2017 ACADEMIC CALENDAR

September	
4	Labor Day: NO CLASSES
5	**Pre-College Conference**
6	**Classes begin: day, evening, graduate**
12	Last day to add day courses (state-supported)
18	Last day to drop day courses (state-supported)
18	Last day to add/drop evening/graduate courses (non state-supported)
October	
9	**Columbus Day: NO CLASSES**
16	Last day to declare/change major/minor
18	Last day to makeup Incomplete grades from Spring/Summer 2017
25	Failure warnings due in the Registrar's Office
30	Failure warnings issued to students
10/30-11/9	Advising for Pre-registration
November	
1	Last day to withdraw from courses/school
9	Last day to elect Pass/Fail option
10	**Veterans' Day Observed: NO CLASSES**
13-17	Pre-registration for Spring 2018
22-25	Thanksgiving Recess
December	
11/27-12/1	Student evaluation of the faculty
8	**All classes end**
11	Reading Day
12-20	Final Exams-day classes
21-22	Make-up days for exams postponed due to inclement weather
28	Final grades for Fall 2017 due to Registrar's Office
31	**Semester ends**

Examination Schedule: Fall 2017

Class Day and Time	Examination Day and Time
MWF 8:00/8:30AM	Wednesday December 13, 8:30AM
MWF 9:30AM	Friday December 15, 8:30AM
MWF 10:30AM	Monday December 18, 8:30AM
MW/MWF 11:30AM	Wednesday December 13, 12:30PM
MW/MWF 12:30PM	Friday December 15, 12:30PM
MW/MWF 1:30/2:00PM	Monday December 18, 12:30PM
MW 3:30PM	Wednesday December 20, 8:00AM
F 11:30/12:30/1:30PM	Wednesday December 20, 11:30AM
MA 150 MATH COMMON EXAM	Wednesday December 20, 3:00PM
TR 8:30AM	Tuesday December 12, 8:30AM
TR 10:00AM	Thursday December 14, 8:30AM
TR 11:30AM	Tuesday December 12, 12:30PM
TR 1:00PM	Thursday December 14, 12:30PM
TR/T 2:30PM	Tuesday December 19, 8:00AM
R 2:30PM	Tuesday December 19, 11:30AM
MA 105/MA 180 MATH COMMON EXAM	Tuesday December 19, 3:00PM

Spring 2018 Academic Calendar

January	
15	**Martin Luther King Day: NO CLASSES**
16	Classes begin: day, evening, graduate
22	Last day to add day courses (state-supported)
29	Last day to drop day courses (state-supported)
29	Last day to add/drop evening, graduate courses (non state-supported)
February	
19	**President's Day: NO CLASSES**
27	Last day to make up Incompletes from Fall 2017
March	
12	Last day to declare/change major or minor
12	Failure warnings due in the Registrar's Office
15	Failure warnings issued to students
19-24	Spring Break: NO CLASSES
3/26-4/6	Advising for Pre-registration

April	
2	Last day to withdraw from courses/school
9-13	Pre-registration for Fall 2018
16	**Patriot's Day: NO CLASSES**
17	Last day to elect Pass/Fail status
23-27	Student evaluation of faculty
May	
8	All classes end
9	Reading Day
10-18	Final Exams-day classes
18	**Graduate Commencement**
19	**Undergraduate Commencement and end of semester**
23	Final Grades for Spring 2018 due to Registrar's Office

Examination Schedule: Spring 2018

Class Day and Time	Examination Day and Time
MWF 8:00/8:30AM	Friday May 11, 8:30AM
MWF 9:30AM	Monday May 14, 8:30AM
MWF 10:30AM	Wednesday May 16, 8:30AM
MW/MWF 11:30AM	Friday May 11, 12:30PM
MW/MWF 12:30PM	Monday May 14, 12:30PM
MW/MWF 1:30/2:30PM	Wednesday May 16, 12:30PM
MW 3:30PM	Friday May 18, 8:00AM
F 11:30/12:30/1:30PM	Friday May 18, 11:30AM
MA 150 MATH COMMON EXAM	Friday May 18, 3:00PM
TR 8:00/8:30AM	Thursday May 10, 8:30AM
TR 10:00AM	Tuesday May 15, 8:30AM
TR 11:30AM	Thursday May 10, 12:30PM
TR 1:00PM	Tuesday May 15, 12:30PM
TR/T 2:30PM	Thursday May 17, 8:00AM
R 2:30PM	Thursday May 17, 11:30AM
MA 105/MA 180 MATH COMMON EXAM	Thursday May 17, 3:00PM

DGCE Summer 2017 Academic Calendar

March	
7	Summer Registration Begins
May	
22	**Summer Session I Begins**
29	**Memorial Day: NO CLASSES/COLLEGE CLOSED**
30	Last day to Add/Drop (Summer I)
June	
9	Last day to Withdraw (Summer I)
9	Last day to request Pass/Fail (Summer I)
30	Summer Session I Ends
30	**Registration shuts down at 11:30 a.m. then restarts on July 3**
July	
4	**Independence Day Observed: NO CLASSES/ COLLEGE CLOSED**
5	**Summer Session II Begins**
10	Last day to Add/Drop (Summer II)
21	Last day to Withdraw (Summer II)
21	Last day to request Pass/Fail (Summer II)
August	
15	Summer Session II Ends

Important Notes:

First time WSU students taking ONLINE or HYBRID/ BLENDED courses registering by fax, mail or in person must register by Friday, May 5th in order to get online access set up in time for the start of Summer I. The deadline for Summer II registration for a first time WSU student talking ONLINE or HYBRID BLENDED courses is Friday, June 16th.

Students must visit WebAdvisor to view course schedules and for their final grades. Schedules and grades will not be mailed.

Winter Session 2018 January 2-January 12, 2018

October 18-January 3	Wintersession 2018 Registration
Tuesday, January 2	Classes Begin
Wednesday, January 3	Deadline to add or drop Wintersession Classes
Thursday, January 4	Deadline to request Pass/Fail grading

	Deadline to request a withdrawl
Friday, January 12	Last day of classes
Saturday, January 13	Snow Cancellation Make Up Day

Registration Dates: October 18, 2017-January 2, 2018

Registration: On-Line http://www.worcester.edu or in person: Shaughnessy Administration Building, 4th Floor. First time WSU students taking ONLINE or BLENDED courses, registration deadline is **December 1, 2017.** Payment is due in full at registration: MasterCard, VISA, Discover, American Express, Check or Money Order. ADD/DROP through January 4th with full refund. WITHDRAW or PASS/FAIL declaration through January 5th.

Office of Academic Affairs

Dr. Lois A. Wims
Provost and Vice President for Academic Affairs

Dr. Henry Theriault
Associate Vice President for Academic Affairs

Dr. Roberta Kyle
Associate Vice President for Continuing Education and Dean of Graduate Studies

Dr. Anthony K. Adade
Associate Vice President and Chief Information Officer

Dr. Linda S. Larrivee
Dean of the School of Education, Health and Natural Sciences

Dr. Russ Pottle
Dean of the School of Humanities, Social Sciences

Marcela Uribe-Jennings
Assistant Dean of Multicultural Affairs and Alternatives for Individual Development

Dr. Megna Dillip
Director of Commonwealth Honors Program

TBA
Director, Academic Affairs Administrative Support

Ethnic Studies

Concentration

Program Structure and Requirements

- Offered as an interdisciplinary concentration
- 15 credits total across at least two disciplines.
- Required course (3 credits): ET-100
- Core Courses (12 Credits): Chosen from approved list of electives across departments

Courses

As an interdisciplinary concentration, Ethnic Studies draws its core courses from multiple disciplines across campus. The following courses currently offered at WSU form the list of available electives for an Ethnic Studies Concentration.

Communication		(15 credits)
CM-345	Media and Democracy	3
CM-350	Intercultural Communication	3
CM-384	Media Criticism	3
CM-390	Alternative Communication	3
CM-416	Media Law and Ethics	3
Education Department		(6 credits)
ED-270	Diversity & Multicultural Ed	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
English Department		(21 credits)
EN-132	World Literature	3
EN-167	Literature and Human Rights	3
EN-169	Ethnic Literature in the U.S.	3
EN-240	Survey of Postcolonial and Transcultural Literature	3
EN-345	American Women Writers (Title will change in 2016 to "American Women Writers")	3
EN-347	Studies in U.S. Ethnic Literature	3
EN-348	Postcolonial Women's Writing	3
Health Sciences Department		(3 credits)
HC-234	Multiculturalism and Health	3
History and Political Science Department		(39 credits)
HI-205	Native America	3
HI-208	American Immigrant History	3
HI-217	US Social History	3
HI-221	African-American History I	3
HI-222	African-American History II	3
HI-230	Nicaragua, the US and the World	3
HI-248	Seminar on Globalization & Human Rights	3
HI-244	American Urban History	3
HI-303	Colonial History I	3
HI-345	Religions in America	3
HI/PO-320	Citizen Nation	3
HI-450	Special Topics in History (Hegemony & Social Justice in the USA)	3

HI-450	Special Topics in History (History of Latinos in the USA)	3
Philosophy Department		(18 credits)
PH-151	Race, Gender, and the Law	3
PH-177	Introduction to Latin American Philosophy	3
PH-178	Africana Philosophy	3
PH-241	Genocide and Human Rights	3
PH-242	Race, Nation, Class, Gender and Sexuality	3
PH-251	Mass Violence Against Women	3
Psychology Department		(3 credits)
PS-255	Psychological Foundations of Diversity	3
Sociology Department		(12 credits)
SO-285	Race, Class and Gender	3
SO-315	Social Movements	3
SO-350	Social Stratification	3
SO-360	Urban Sociology	3
Urban Studies Department		(12 credits)
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-310	Power, Politics and Decision-Making in Urban Communities	3
UR-380	Public Policy and Cultural Diversity	3
Visual and Performing Arts Department		(6 credits)
AR-165	Creating Cultural Forms	3
TH-237	History of Theatre II	3
World Languages		(3 credits)
SP-333	Hispanic Presence in US	3

Faculty

As an interdisciplinary concentration, Ethnic Studies draws its core faculty from multiple disciplines across campus. Each faculty member's information can be found at the respective department for each of the courses. Additionally, the Ethnic Studies Program seeks to build linkages between Academic Affairs and Student Affairs to support students' academic success and the enrichment of the campus culture. The Director/Program Area Chair for Ethnic Studies is Dr. Emanuel E. Nneji in the Department of Communication.

Ethnic Studies Courses (Undergraduate)

ET-100 Introduction to Ethnic Studies
LASC Categories: TLC, HBS, DAC
An interdisciplinary survey course analyzing socio-political, economic, historical and contemporary issues related to African American, Latino/a American, Asian American and Native American (ALANA) communities.
Every year. 3 Credits

Global Studies

Global Studies Concentration

Global Studies is an interdisciplinary academic area that draws from a wide range of disciplines in the Humanities, the Sciences and the Arts to examine global processes and events and their effects at a local level. For the last two decades the world has been undergoing a sustained reorganization along economic, social, political, cultural, technological and environmental lines that cut across national boundaries. WSU has also experienced an increased global connectivity, integration and interdependence, and witnessed the emergence of planet wide issues such as climate change, poverty, new technologies and entrenched wars. In response to these real world events, Global Studies has emerged as a dynamic interdisciplinary academic field to study the forces shaping these complex processes.

The mission of the Global Studies concentration is to prepare students to understand international affairs and provide them with a solid background for decision-making in an increasingly interdependent world community. Students are encouraged to connect their knowledge of a particular region of the world to larger transnational processes and to examine their identities in a global frame. The interdisciplinary concentration in Global Studies will give students added skills to function in a global market and the depth of understanding necessary to be responsible citizens of planet Earth.

Requirements for a Concentration in Global Studies: 15 credits

Students are required to take a total of five Global Studies courses starting with GL-150 (Required) plus four electives chosen from across various disciplines. One of the elective courses has to be at a 200 level and another at either a 300 or 400 level. No more than two courses can be counted from the same department. Students are strongly encouraged to elect a world language course other than English and/or a study abroad course that meets the Global Studies criteria.

Global Studies is an interdisciplinary program drawing from the faculty of all departments at Worcester State University. Each faculty member's information can be found at the respective department for each of the courses.

Sebastian Velez
Director of Global Studies
Assistant Professor of Biology

Global Studies Courses

GL-150 Introduction to Global Studies
This course analyzes the forces reorganizing the planet along economic, social, political, cultural, technological and environmental lines across national boundaries.
Every year. 3 Credits

GL/AB-210 Intermediate Arabic I
LASC Categories: TLC
Introduction in advanced rules of Arabic grammar and verb system, and in advanced writing and reading.
3 Credits

GL/AR-111 Art History: the Renaissance to Picasso
Study of the interrelationships of the visual arts with political, social, and intellectual developments in the Western world.
3 Credits

GL/AR-112 World Art Survey I
LASC Categories: TLC, CA
Surveys the world's major cultural achievements in the visual arts from the prehistoric period to ca 1400.
3 Credits

GL/AR-113 World Art Survey II
LASC Categories: CA, TLC
Major cultural achievements in the visual arts from ca 1400 to the early twentieth century.
3 Credits

GL/BA-305 Organizational Behavior
Prerequisites: BA-200
Study of organizational effectiveness and quality of working life, through individual, organizational, and contextual level theories and practices.
3 Credits

GL/BA-430 Administrative Practices and Management
Prerequisites: BA-305
Overview and analysis of human conduct in work-organization settings.
3 Credits

GL/BA-440 International Business and Management
Prerequisites: BA-316 BA-318
Study and analyze the nature, structures and strategies of international/global businesses. examine international markets, economic systems, value-chains and core competencies of a firm.
3 Credits

GL/BA-494 International Marketing
Prerequisites: EC-120 BA-318
With the rapid and continuous changes in global environment we will examine the complex issues in international marketing faced by today's manager.
3 Credits

GL/BI-112 Diseases and Mankind
LASC Categories: NSP, GP
Diseases of ancient and modern man; the impact on history, religion, science, art and philosophy.
3 Credits

GL/BI-114 Plants and Human Affairs
LASC Categories: GP, NSP
Man's dependence upon plants and their influence on civilization and its art, religions, literature, folklore, medicine, and human behavior.
3 Credits

GL/BI-199 Selected Topics in Biological Sciences
Each topic is a lecture and/or laboratory course in a selected area of the biological sciences presented by a departmental instructor. Topics will be announced in advance.
1-4 Credits

GL/BI-202 Principles of Ecology
LASC Categories: NLL, WAC
Prerequisites: BI-106 or BI-140, one course from MA-110 MA-180 MA-150 MA-190 or MA-200 and EN-102, EN-202, or EN-250
Basic ecological theory relating to organism-environment interactions; population dynamics, and ecosystems. Three hours of lecture and a three-hour laboratory per week.
4 Credits

GL/CH-106 Paper Or Plastics?
LASC Categories: NSP
Students will study modern issues related to chemistry. These will include sustainability, green chemistry, climate change and ozone layer.
3 Credits

GL/CH-320 Environmental Chemistry
Prerequisites: CH-120 and either CH-121 or CH-201
Chemistry of the atmosphere, soil, and natural water systems, air and water pollution water treatment, hazardous wastes and pollution control.
3 Credits

GL/CM-107 Journalism and Democracy
This course introduces students to the history of American journalism and the role of journalism in democractic and non-democratic societies.
3 Credits

GL/CM-191 Special Topics
Introductory course to cover various topics
3 Credits

GL/CM-271 Media and Globalization
This course examines the emergence of global media and its impact on the development of a global world.
3 Credits

GL/CM-350 Intercultural Communication
Prerequisites: CM-100
Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality,politics and economics.
3 Credits

GL/CM-390 Alternative Communication
Prerequisites: CM-103
This course introduces students to the theory and practice of alternative communication and its relationship with culture and politics. [Cross-listed with WO/CM-390.]
3 Credits

GL/EC-210 Current Economic Issues
Prerequisites: EC-110 EC-120
This course is designed to connect economic knowledge and theory acquired at the introductory level to current economic issues and policy.
3 Credits

GL/EC-307 International Finance
Study of how international trade and investment is financed in a world of floating, fixed and managed exchange rate systems.
3 Credits

GL/EC-308 International Trade
LASC Categories: GP
Prerequisites: EC-110 EC-120
3 Credits

GL/EC-403 Special Topics in Economics
Prerequisites: EC-200 and EC-201
Coverd selected topics in economics of mutual interest to the student and faculty.
1-3 Credits

GL/ED-271 International and Comparative Education
LASC Categories: ICW, GP
This course compares the educational policies to practices and outcomes to two or more countries
3 Credits

GL/ED-339 Children's Literature: Multicultural Literature for PK-9
LASC Categories: HBS, TLC, DAC
Facets of literature for children and criteria for the selection of each, techniques and preparation and use.
3 Credits

GL/EN-107 Journalism and Democracy
This course introduces students to the history of American journalism and the role of journalism in democratic and non-democratic societies.
3 Credits

GL/EN-132 World Literature: Survey of Asian, African and Latin American Literature
LASC Categories: DAC, GP, TLC
3 Credits

GL/EN-167 Literature and Human Rights
LASC Categories: GP, DAC, HBS
An analysis of in ternational creative writing dealing with the subject of human rights. Resource persons from different fields will be utilized.
3 Credits

GL/EN-169 Ethnic Literature in the U.S.
LASC Categories: TLC, USW, DAC
Study of ehtnic literature in the U.S., focusing on African-American, Asian-American, Latino, and Native American writers.
3 Credits

GL/EN-240 Survey of Postcolonial and Transcultural Literature
LASC Categories: GP
Prerequisites: EN-102 or EN-250
Introduction to literatures in English from formerly colonized countries in Africa, Asia, and the Caribbean, and from the postcolonial diaspora.
3 Credits

GL/EN-348 Postcolonial Women's Writing
LASC Categories: GP
Prerequisites: EN-102
Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression.
3 Credits

GL/EN-400 Seminar
Prerequisites: EN-102
Student prsentations on individual figures and particular problems in literature.
3 Credits

GL/EN-450 Special Topics in English
Prerequisites: EN-102
Specific content will vary in response to particular student and faculty interests.
3 Credits

GL/FR-191 Special Topics in French
An introductory level course in French on current or specialized topics.
3 Credits

GL/FR-210 Intermediate French I
LASC Categories: TLC, GP
Prerequisites: FR-102
Review of fundamentals and presentation of more comlpex grammatical features; development of conversational skills; selected readings, written and oral composition.
3 Credits

GL/FR-211 Intermediate French II
LASC Categories: TLC, GP
Continuation of FR 210.
3 Credits

GL/FR-321 Advanced French Composition
LASC Categories: TLC, WAC
Prerequisites: EN-102 or EN-250 or EN-202
Practice in diverse composition styles as well as review of grammar, and introduction to reading French texts. Conducted in French. [Prerequisite: Two 200-level French courses.]
3 Credits

GL/FR-323 Advanced French Conversation
LASC Categories: TLC
Prerequisites: 2 courses From Subject FR; From Levels 200 300 400;
Pronunciation and comprehension exercises, discussions, practice in paragraph, essay and letter writing.
3 Credits

GL/FR-346 Twentieth Century French Literature
LASC Categories: GP, TLC
Prerequisites: 2 courses From Subjects FR; From Levels 200;
Major novelists, dramatists, and poets from the turn of the century to the present. Conducted in French.
3 Credits

GL/GE-102 Human Geography
LASC Categories: HBS, GP
Introduction to human geography, emphasizing globalization, human-environment relations, and other processes of change. Spatial patterns and spatial interaction in human activities, including population, development, economics, politics, urbanization and culture.
3 Credits

GL/GE-110 World Regional Geography I
LASC Categories: GP, HBS
This survey examines characteristics of land and peoples of Europe and Asia.
3 Credits

GL/GE-111 World Regional Geography II
LASC Categories: GP, HBS
Analysis of the physical, cultural and economic regions of Africa, Oceania and the Americas.
3 Credits

GL/GE-255 Geography of Africa
Prerequisites: one of the following: GE-102, GL/GE-102, GE-111, GL/GE-111, GL-150, SO-100, SO-110, UR-101.
Anaylsis of the physical and human geography of Africa.
3 Credits

GL/GE-258 Global Environmental Change
Prerequisites: one course from GE-102, GL/GE-102, GS-101, GS-150 NS-150 and UR-101 or CH-106
Introduction to the science, political economy and ethics of global environmental change.
3 Credits

GL/GE-285 Sustainable Communities
LASC Categories: HBS, USW
Prerequisites: one of the following: GE-102, GL/GE-102, GL-150, EC-110, EC-120.
Exploration of changes in US and global economic landscape, 1970 to present. Approaches to sustainable economic development.
3 Credits

GL/GE-308 Environment and Development
Prerequisites: GE-258.
The global ecology of rich and poor environmental implications of poverty, economic development, mass consumption, globalization and demographic change.
3 Credits

GL/GE-312 Sustainable Food Systems
Prerequisites: GE-102 and one 200 level course from subjects GE GS SO UR
Overview of the structure, evolution, costs and benefits of the global food system. Exploration of local and global alternatives.
3 Credits

GL/GE-360 Geography of the Middle East
Prerequisites: GE-102
The Middle East: geography, society, economics and political structure.
3 Credits

GL/HC-202 Introduction to Global Health
LASC Categories: ICW, GP, DAC
This course is an overview and will focus on the developing world from a population and prevention perspective.
3 Credits

GL/HC-403 Department Workshop in Community Health
The subject matter of this course will be refective of the changing isssues within the field of community health.
3 Credits

GL/HE-390 Environmental Health
Prerequisites: HE-100.
Examination of the issues affecting the environment and their impact on individual and global health.
3 Credits

GL/HE-400 Departmental Workshop
Current issues in Health.
3 Credits

GL/HI-103 World Civilization I
LASC Categories: GP, TLC
Surveys economic, social, political and intellectual developments of world civilizations and their inter-relationship from ancient times to 1500.
3 Credits

GL/HI-104 World Civilization II
LASC Categories: GP, TLC
Surveys economic, social, political, and intellectual development of world civilizations and their inter-relationship from 1500 to 1914.
3 Credits

GL/HI-105 World Civilization III
LASC Categories: TLC, GP
Surveys economic, social, political, and intellectual development of world civilizations and their inter-relationship from 1914 to the present.
3 Credits

GL/HI-112 US History II
LASC Categories: CON, USW
From the Civil War era to the present. Topics include politics, society, economy, diplomacy, and culture in Modern America.
3 Credits

GL/HI-193 Special Topics in History for First Year Students
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
3 Credits

GL/HI-201 International Relations I
LASC Categories: USW, GP, WAC
Prerequisites: PO-101, or HI-103, or HI-104, and EN-102.
Theory and practice of international security (realism and internationalism) and international political economy (liberalism and protectionism) in their historical context.
3 Credits

GL/HI-202 International Relations II
LASC Categories: USW, GP, WAC
Prerequisites: one of the following: PO-101, or HI-103, or HI-104, and EN-102.
The promise and problems of globalization (spread of free market capitalism and political democracy).
3 Credits

GL/HI-204 History of Science and Technology
Progress of science from the Enlightenment, including applied science or technology from the 19th century. Complements History of Mathematics.
3 Credits

GL/HI-205 Native America
This survey covers the broad sweep of native American history and focuses on the encounter between American and European civilizations and how Native culture has adapted through the centuries.
3 Credits

GL/HI-208 American Immigrant History
Survey of immigration. Topics such as old-world background, impact on US, nativism, cultural pluralism, religion, mobility, family and politics.
3 Credits

GL/HI-213 Colonial Latin America
The People of Latin America from Pre-Columbian societies to the wars for independence, focusing on race, sex and power.
3 Credits

GL/HI-214 Modern Latin America
LASC Categories: TLC, GP, DAC
The people of Latin America from independence to the present, focusing on race, sex and power.
3 Credits

GL/HI-221 African-American History I
The people of African descent from the emergence of the slave trade to the Civil War, focusing on race, gender, and power.
3 Credits

GL/HI-224 English History I
Prerequisites: HI-103 or HI-104
English history from earliest settlement to the reign of Elizabeth I. Origins of the Common Law, Parliament, and English liberty.
3 Credits

GL/HI-225 English History II
Prerequisites: HI-224
English history through the English Revolution, the Industrial Revolution, the British Empire, the World Wars, and decline.
3 Credits

GL/HI-226 Latin American History Through Film
This course will explore how filmmakers have portrayed Latin American History in their movies.
3 Credits

GL/HI-230 Nicaragua, the US and the World
LASC Categories: USW, DAC, TLC
This course will examine the impact of globalization and imperialism on the lives of Nicaraguans at home and in their diasporic communities.
3 Credits

GL/HI-237 Modern Far East History II
Civilizations dramatically different from our own. focusing upon China, Japan, and Southeast Asia since 1600.
3 Credits

GL/HI-247 Central America and the Caribbean
This survey examines the political, cultural and social history of Central America and the Caribbean from pre-Columbian times to the present with an emphasis on the 20th century.
3 Credits

GL/HI-248 Seminar on Globalization and Human Rights
LASC Categories: USW, GP, DAC
A.I.D. program participants in their sophomore year will explore globalization and human rights and issues of personal growth and academic development.
3 Credits

GL/HI-250 Special Topics in History
Special topics at the introductory or intermediate level; especially appropriate for first ans second-year student.
3 Credits

GL/HI-251 The Roots of China's Rise: Reform, Revolution, and Reinvention
LASC Categories: TLC, GP
Examines the modern historical roots of China's rise as an international power, from the decline of its last imperial dynasty through the tumults of 20th century social movements to its recent emergence as a global economic power.
3 Credits

GL/HI-261 Middle East History I
LASC Categories: TLC, GP
The rise and expansion of Islam; the Caliphate; Muslim religion, civilization and its impact on the West, decline of medieval Islam.
3 Credits

GL/HI-267 US-Latin American Relations
LASC Categories: USW, WAC, DAC
This course will analyze the political, economic, social, and cultural impact of the interactions between and among governments and people of the US and Latin America.
3 Credits

GL/HI-308 Europe in the Age of Revolution and Nationalism: 1789-1870
Prerequisites: HI-103 or HI-104
The French Revolution, Napolean, Congress of Vienna; nationalism, liberalism, socialism; Second French Empire; German and Italian unification.
3 Credits

GL/HI-314 Twentieth Century Middle East History
Prerequisites: HI-103 or HI-104 or HI-105 or HI-111 or HI-112 or HI-261
The Young Turk Revolution, division of Ottoman Empire in World War I; rise of new states; the Arab-Israeli conflict.
3 Credits

GL/HI-330 Politics of the Middle East I
Prerequisites: one of the following: HI-104, or HI-105, or HI-111, or HI-112, or PO-101, or HI-261, or HI-314.
Discusses governments and politics of eastern Arab countries, Turkey, Iran, and Israel. International rivalries in the area are also discussed. [Cross listed as PO330.]
3 Credits

GL/HI-335 Imperial Crossroads of Modern East Asia
LASC Categories: TLC, GP
Examines East Asian history at the crossroads of Chinese, Japanese, Russian, and Korean colonial and nationalist movements in a region called Manchuria, presently China's northeast border with Russia, Korea, and Mongolia.
3 Credits

GL/HI-337 Travels in Asia
LASC Categories: TLC, GP
Travels in Asic examines modern East Asian history through the lens of Chinese, Japanese, European, and American travel narratives from the seventeenththrough the twentieth centuries.
3 Credits

GL/HI-450 Special Topics in History
3 Credits

GL/MU-140 World Music
LASC Categories: CA
An introduction to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East and India.
3 Credits

GL/OT-411 Occupational Therapy International Service Learning Experience
Instruction in occupational therapy methods with an experiential component providing intervention to an underserved population in a foreign country.
2 Credits

GL/PH-150 Women in Western Ideas
LASC Categories: HBS, TLC, DAC
Investigates the concept of woman from ancient Greece to the present.
3 Credits

GL/PH-170 Ancient Chinese Philosophies in a Cultural Perspective
LASC Categories: GP, TLC
Ancient Chinese philosophies of Taoism, Confucianism, Buddhism, and neo-Confucianism in the context of contemporary developments in China; Communism, capitalism, and Western influences considered.
Every year. 3 Credits

GL/PH-172 Asian Philosophies and Contemporary Perspectives
LASC Categories: GP
Studies the philosophies of India, China, Japan, and the vitality of ancient traditions in a time of cultural change: Buddhism, Taoism, Confucianism, Jainism,Hinduism and Islam.
3 Credits

GL/PH-177 Introduction to Latin American Philosophy
LASC Categories: TLC, DAC, GP
An introduction to current and longstanding debates within Latin American philosophy.
3 Credits

GL/PH-230 Religious Philosophies, East and West
An examination of the major religious systems, both oriental and occidental.
3 Credits

GL/PH-241 Genocide and Human Rights
LASC Categories: GP, USW
This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.
3 Credits

GL/PH-250 Global Feminism
LASC Categories: TLC, GP
Investigates the theoretical underpinnings of women's movements for equal rights around the globe.
3 Credits

GL/PH-251 Mass Violence Against Women
LASC Categories: USW, GP
A philosophy-based, interdisciplinary course examining historical and contemporary mass violence against women.
3 Credits

GL/PH-290 Advanced Special Topics in Philosophy
A treatment of current or special topics for students beyond the introductory level.
Every year. 3 Credits

GL/PO-201 International Relations I
LASC Categories: USW, GP, WAC
Prerequisites: PO-101 HI-103 or HI-104 and EN-102
Theory and practice of international security (realism and internationalism) and international political economy (liberalism and protectionism) in their historical context.
3 Credits

GL/PO-202 International Relations II
LASC Categories: USW, GP, WAC
Prerequisites: one of the following: PO-101, or HI-103, or HI-104, and EN-102.
The promise and problems of globalization (spread of free market capitalism and political democracy).
3 Credits

GL/PO-330 Politics of the Middle East I
Prerequisites: one of the following: HI-104, or HI-105, or HI-111, or HI-112, or PO-101, or HI-261, or HI-314.
Discusses governments and politics of eastern Arab countries, Turkey, Iran, and Israel. International rivalries in the area are also discussed. [Cross listed as HI330.]
3 Credits

GL/PS-365 Cultural Psychology
LASC Categories: TLC, HBS, WAC
Prerequisites: PS-101 EN-102 PS-210
This course addresses the role culture plays in human psychological processes and approaches to researching cultural aspects of human action.
3 Credits

GL/SO-110 Cultural Anthropology
Cross cultural analysis of the human capacity, for adaptation and technological and ideological development. Significant field studies will be examined.
3 Credits

GL/SO-199 Special Topics
Prerequisites: SO-100
Introductory level topics. Topic announced at pre-registration.
3 Credits

GL/SO-270 Social Theory I
Prerequisites: SO-100
Fundamental concepts and intellectual traditions, especially the contributions of Comte, Spencer, Marx, Toennes, Durkheim, and Simmel.
3 Credits

GL/SO-299 Special Topics: Sociology
Prerequisites: SO-100.
Intermediate level topics. Topic announced at pre-registration.
3 Credits

GL/SO-420 Seminar in Sociology
Advanced study topics in selected areas of sociology; announcement made at pre-registration time.
1-3 Credits

GL/SO-425 Global Development
LASC Categories: GP, HBS, WAC
Prerequisites: EN-102
This course gives an overview of the field of development and processes of development and underdevelopment in developing countries.
3 Credits

GL/SP-191 Special Topics in Spanish
An introductory level course in Spanish or in current or specialized topics.
3 Credits

GL/SP-193 Special Topics in Spanish for First Year Students
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
3 Credits

GL/SP-323 Spanish Conversation I
LASC Categories: TLC
Prerequisites: two SP-200 level courses or higher.
Intensive conversational practice for improving intonation, pronunciation, fluency, review of language usage. this course is for non-native speakers only.
3 Credits

GL/SP-324 Advanced Spanish Conversation II
LASC Categories: TLC
Prerequisites: SP-323 or equivalent.
Continuation of SP 323.
3 Credits

GL/SP-332 The Hispanic World Today
LASC Categories: DAC, GP
Prerequisites: two SP 200 level courses or higher.
3 Credits

GL/SP-349 Spanish-American Literature
Prerequisites: SP 321, SP 323, SP 324.
Representative works from South and Central American authors from the colonial period to the present.
3 Credits

GL/SP-401 Advanced Study: Special Topics
Special topics in language, literature, civilization or field work of mutual interest to student and instructor.
3 Credits

GL/UR-191 Special Topics
This introductory course will cover topics in Urban Studies which are of special interest to first-year students.
3 Credits

GL/UR-201 Analysis of Urban Systems
LASC Categories: HBS
3 Credits

GL/UR-213 Human Identity and Urban Environment
Prerequisites: UR-101.
Study of factors affecting identity in contempory urban settings including race, ethnicity, class, age, and sex categories and roles.
3 Credits

GL/UR-290 Gender and the City
LASC Categories: WAC, GP, HBS
Prerequisites: EN-102
Exploration of ways in which gender, both male and frmale, structures responses of individuals to urban life and spaces.
3 Credits

GL/UR-353 Aging in a Global Society
LASC Categories: GP, DAC
Explores the ramification of unrelenting Global Aging, focusing on the questions, what are old people for and the connections across generations
3 Credits

GL/UR-421 Selected Topics: Urban Studies
Prerequisites: UR-101
In-depth examination of topical issues challenging the intellectual and creative interests of advanced students in urban studies.
3 Credits

GL/UR-422 Selected Topics: Gerontology
In-depth examination of topical issues in gerontology which afford the advanced student the opportunity to pursue gerontological research.
3 Credits

GL/UR-440 Practicum in Urban Studies
Prerequisites: UR-101
Directed experiential study for advanced students.
1-3 Credits

Information Technology

Minor in Information Technology

The Information Technology minor is an interdisciplinary minor that gives students the opportunity to develop skills and capabilities for the effective use of information technology in their discipline. This minor is available for all non-Computer Science majors and is designed to address information technology needs and career interests regardless of major. Please see your faculty advisor for more information.

To obtain a minor in information technology, students need to complete six (6) courses for a total of 18+ credits.

Required Course		(3 credits)
CS-101	Basics of Computer Science	3

Two Courses from Group I: Courses in this group will discuss the representation and manipulation of data in digital form. This may include the conversion process of the data from a form outside the computer, the issues and trade-offs involved in developing a representation, and the algorithms used for the manipulation and transformation of data.

Two courses from Group II: Courses in this group involve intensive, discipline-specific use of computers (beyond email, word processing, basic spreadsheets, presentation software and web browsing).

One course from Group III: Courses in this group will discuss information technology and its impact on society. At least 1/3 of the course content should relate to information technology.

The list of courses under each of the above three groups varies from semester to semester. Students are strongly encouraged to contact the Information Technology minor coordinator before registering for courses.

Liberal Studies

Director

Barbara Zang, Professor of Communication (2002), Director of Liberal Studies Program (2015)
B.S., University of Missouri; M.A., University of Toledo; M.A., University of Missouri; Ph.D., Indiana University

The Liberal Studies major provides students a flexible, customized alternative to existing programs of study while fostering academic excellence in interdisciplinary learning. Liberal Studies majors may earn either the bachelor of arts or the bachelor of science degree.

As an individualized program, the Liberal Studies major prepares students for life after college through a broad-based liberal arts education and the fulfillment of these overarching learning outcomes: interdisciplinary learning; career development; entrepreneurship and self-advocacy; and engaged citizenship.

The Liberal Studies major serves incoming first-year students who have a clear sense of their academic goals and want to craft their own major of study; transfer students who want to maximize the use of previously earned credits by designing their own major; students who have not selected a major of study or who decide not to complete their initial intended major; and adult students who may already be working in their desired field but seek a degree completion program.

Admission Requirements

Students interested in the Liberal Studies major must meet the standard admissions criteria for Worcester State University. Incoming first-year and transfer students must meet with the director of Liberal Studies once they are admitted to to the university to discuss a program of study. These students will be required to enroll in LS-190. During this course they will submit a written plan of study to the director with a rationale for the selection of the areas of study. Once approved, this plan of study becomes the student's degree audit.

Current Worcester State students who want to change from undeclared status or from other majors must also meet with the director of Liberal Studies before changing majors. Those who want to pursue a Liberal Studies major will be required to enroll in LS-190. During this course they will submit a written plan of study to the director with a rationale for the selection of the areas of study.

This development of a program of study and review process allow for important conversations about a student's academic and professional goals, the best use of transfer credits, and the selection of the two primary areas of study.

Standards for Minimum Academic Performance in the Liberal Studies major

Liberal Studies majors must meet the requirements for graduation as specified in the Undergraduate Catalog. These include the completion of a minimum of 120 credits with a 2.0 cumulative grade point average and a minimum 2.0 grade point average in the two areas of study.

Requirements for the Liberal Studies major

In addition to meeting the Liberal Arts and Sciences Curriculum (LASC) requirements for all undergraduates, which is 40 credits, the Liberal Studies major will complete a minimum of 39 credits from two areas of study.

The first area (18-24 credits) must be completed at Worcester State University in one of the University's established minors.

The second area (15 or more credits) may be either another of the University's established minors, a concentration, or a self-designed cluster of classes. A maximum of 18 credits may be transferred in to this second area of the major.

At least 15 credits in the Liberal Studies student's two areas must be at the 300-level or above. The program of study plan must reflect that at least 51 percent of the major credits are taken at Worcester State University. To receive a baccalaureate degree from Worcester State University, a student must complete 30 of the last 40 credits at Worcester State University.

In addition, all Liberal Studies students must take:

LS-190	St: Introduction to Liberal Studies	3-4
LS-490	Capstone/Senior Research in Liberal Studies	3

Two optional courses are designed to allow for flexibility in the major and to provide a deeper understanding of an interdisciplinary education:

LS-290	St:Intermediate Liberal Studies	3-4
LS-390	St: Advanced Liberal Studies	3-4

Each Liberal Studies major will be required to maintain an e-portfolio of work produced in the student's various courses, beginning in LS-190 and culminating inLS-490.

Evening students: Those wishing to declare a Liberal Studies major may, depending on the chosen areas of study, complete the required courses in the evening or during the summer.

Honors program: Liberal Studies majors with a 3.3 GPA or higher who wish to graduate with honors may add a 3-credit research project, creative work/ portfolio, or thesis to the individualized plan of study.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Women's Studies

Women's Studies Concentration

Women's Studies is an interdisciplinary, academic course of study which lies at the intersection of the traditional academic disciplines such as literature, history, and philosophy in the humanities; psychology and sociology in the social sciences; and biology and geography in the natural sciences. Women's Studies also has found a prominent place in areas such as education, communications, urban studies, and health sciences. Wherever gender issues are germane to a discipline, Women's Studies can be found, in part as a corrective to the centuries-long tendency of the traditional disciplines to focus mainly or exclusively on men and in part to bring new models of understanding to all areas of study.

The undergraduate concentration in Women's Studies brings together courses that focus on women and provides a critical analysis of gender and the related categories of class, race, and other dimensions of social power. Gaining knowledge about women and men and understanding knowledge generated by Women's Studies helps students to move through a complex contemporary world.

Requirements for a Concentration in Women's Studies: 15 credits

The Women's Studies concentration is interdisciplinary; it uses a broad variety of academic disciplines in achieving its goals. Students are required to take a total of five Women's Studies courses from at least two disciplines. It is recommended that students take an introductory course such as WO/UR-103 or WO/PH-150. Students are also encouraged to engage in some sort of specialized experience such as an independent study, a directed readings course leading to a major paper, a creative project or an internship. Students in

Women's Studies may use courses to simultaneously count for a concentration in Women's Studies and other Worcester State University requirements.

Women's Studies is an interdisciplinary program drawing from the faculty of all departments at Worcester State University. Each faculty member's information can be found at the respective department for each of the courses.

Women's Studies Courses (Undergraduate)

See LASC section for information on the Liberal Arts and Sciences Curriculum (LASC).

WO/AR-222 Art of the Twentieth Century
Surrealism and other art movements in Europe and America from the end of the first Worls War to the present.
3 Credits

WO/AR-225 Art Since Mid-Century
LASC Categories: CA, TLC
Explores challenges to the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950.
3 Credits

WO/AR-350 Special Topics in Art
A course covering topics which vary in response to specific student and faculty interest.
3 Credits

WO/AR-400 Independent Study in Art
An opportunity for further individual study in a special interest. Self directed under super vision of faculty
Fall and Spring. 1-6 Credits

WO/BA-304 Women Entrepreneurs & Leaders
Students will focus on the research of women business leaders and the roles they have played in the global economy.
3 Credits

WO/BA-482 Selected Topics: Business Administration
Selection of topics of mutual interest to the student and faculty.
3 Credits

WO/BI-199 Selected Topics in Biological Sciences
Each topic is a lecture and/or laboratory course in a selected area of the biological sciences presented by a departmental instructor. Topics will be announced in advance.
Every year. 1-4 Credits

WO/CM-100 Intro to Mass Communications
LASC Categories: TLC, HBS
An integrated examination of the history, theory, structure, process, and effects of each of the mass media.
3 Credits

WO/CM-213 Gender and the Media
LASC Categories: HBS, TLC, DAC, WAC
Prerequisites: EN-102 and CM-100
This course will examine how difference is socially constructed along gender lines, and will explore intersections of gender, identity and power.
3 Credits

WO/CM-241 Understanding Movies
LASC Categories: CA, TLC
An introduction to the aesthetics and critical theories of film as an artistic medium of communication through critical observation of classic and contemporary movies.
Every year. 3 Credits

WO/CM-350 Intercultural Communicatons
Prerequisites: CM-100.
Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality, politics and economics.
3 Credits

WO/CM-384 Media Criticism
Prerequisites: CM-100
Evaluation and analysis of film, television, theatre, and radio performances, development of intelligent, ethical standards of judgment.
Every year. 3 Credits

WO/CM-390 Alternative Communication
This course introduces students to the theory and practice of alternative communication and its relationship with culture and politics.
3 Credits

WO/CM-410 Special Topics
This course engages students in advanced examination of emerging communication topics and topics of faculty's area of expertise.
3 Credits

WO/ED-330 Elementary Social Studies and Multiculturalism
Goals, curriculum, skills, issues, teaching strategies in educating diverse populations in a global context.
Prerequiste: Admitted into Stage 2
3 Credits

WO/ED-339 Childern's Literature: Multicultural Literature for Pk-9
LASC Categories: HBS, TLC, DAC
Facets of literature for children and criteria for the selection of each; techniques and preparation and use.
3 Credits

WO/ED-400 Integrated Early Childhood Education
Special education law and procedures, modification of programs for English language learners, working with parents, and developing and implementingan anti-bias curriculum. Pre-requisite: Admitted to Stage II.
3 Credits

WO/ED-450 Independent Study in Education
For the student who wishes to pursue independent study in education; faculty members from other disciplines may be called upon to counsel the student.
1-9 Credits

WO/EN-132 World Lit: Asian, African, Latin American
LASC Categories: GP, TLC, DAC
Representative poems, stories, plays, both ancient and modern, from Asia, Africa, and Latin America.
3 Credits

WO/EN-156 Mythology
LASC Categories: TLC
Myths and legends of ancient Greece and Rome which form a part of the classical tradition in English literature.
3 Credits

WO/EN-167 Literature and Human Rights
LASC Categories: GP, DAC
An analysisof international creative writing dealing with the subject of human rights. Resource persons from different fields will be utilized.
Every 2-3 years. 3 Credits

WO/EN-170 Search for Identity
Understanding the nature and power of fiction, the relation between problems of individual identity, and the operation of the imagination.
3 Credits

WO/EN-172 Women and Literature
Explores basic issues and problems in literature by and about women.
3 Credits

WO/EN-174 Women Poets
A close reading and analysis of poetry written by women from a historical as well as a contemporary feminist perspective
3 Credits

WO/EN-190 Special Readings in Literature
An introductory literature course responsive to current interests or controversies.
3 Credits

WO/EN-240 Postcolonial & Transcult Literature
LASC Categories: GP
Prerequisites: EN-102 OR EN-250
Introduction to literatures in English from formerly colonized countries in Aftrica, Asia, and the Caribbean, and from the postcolonial diaspora.
3 Credits

WO/EN-304 Witchcraft in Medieval & Renaissance Literature
LASC Categories: TLC
Prerequisites: EN-102 or EN-250
This course explores how Medieval and Renaissance literature on witchcraft addressed contemporary concerns.
3 Credits

WO/EN-312 English Novel 18th Century
Prerequisites: EN-102
Purpose, range, and developments in the novel of the eighteenth century: Defoe, Richardson, Fielding, Smollett, Sterne, and others.
3 Credits

WO/EN-314 The English Novel of the Nineteenth Century
Prerequisites: EN-102
Representative nineteenth century novelists: Austen, Bronte, Dickens, Thackeray, Eliot, Hardy, Conrad, and others.
3 Credits

WO/EN-320 Victorian Literature
Prerequisites: EN-102
Study of selected prose and poetry of the major writers of the Victorian period.
3 Credits

WO/EN-336 Contemporary Poetry
Prerequisites: EN-102
Concentrates on poets whose major work was written after World War II; special attention to authors presently writing and publishing.
Every 2-3 years. 3 Credits

WO/EN-344 American Novel II
Prerequisites: EN-102
The American novelists from 1890 to World War II: Crane, Wolfe, Dreiser, Anderson, Hemingway, Steinbeck, and others.
3 Credits

WO/EN-345 Women in American Literature
Prerequisites: EN-102.
The American woman as she is portrayed in fiction, non-fiction, and poetry.
3 Credits

WO/EN-348 Postcolonial Women's Writing
LASC Categories: GP
Prerequisites: EN-102
Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression.
3 Credits

WO/EN-360 Shakespeare I
Prerequisites: EN-102
Major plays. Required of all English majors.
3 Credits

WO/EN-450 Special Topics in English
Specific content will vary in response to particular student and faculty interests.
3 Credits

WO/FR-191 Special Topics in French
An introductory level course in French on current or specialized topics.
3 Credits

WO/FR-193 Special Topics in French for First Year Students
An introductory level course covering topics of special interest to first year students.
3 Credits

WO/FR-341 Introduction to French Literature
LASC Categories: TLC, DAC, GP
Prerequisites: two FR-200 level courses or higher.
Major periods and genres of French literature. Conducted in French.
3 Credits

WO/GE-250 Urban Geography
World urbanization, location, and central place concepts, economy of cities, land use patterns, urban, physical, and societal environmental problems.
3 Credits

WO/GE-285 Economic Geography
Prerequisites: GE-102
Location and distribution of economic activity. Globalization, development, agriculture, transportation and communication networks. Spatial organization and function of business activity.
Every 2-3 years. 3 Credits

WO/HC-234 Multiculturalism and Health
Examination of diverse ethnic/racial and cultural beliefs and practices affecting health and illness.
Every 2-3 years. 3 Credits

WO/HC-403 Department Worshop in Community Health
The subject matter of this course will be reflective of the changing issues within the field of community health.
3 Credits

WO/HE-210 Women's Health Issues
Interactive processes of politics, power and media's influences on research, public health policy and current health issues.
3 Credits

WO/HE-220 Mental Health Education
LASC Categories: HBS, ICW
Prerequisites: HE-100 and HE-200
Examination of mental health as a variable: its creation and the obstacles to sound mental health and positive self-concept.
3 Credits

WO/HE-230 Human Sexuality and Sex Ed
Focus on the need for and understanding of sex education, along with the process of implementing sexuality education, with emphasis upon teacher preparation.
3 Credits

WO/HE-400 Special Topics
Cuurent issues in Health.
3 Credits

WO/HI-111 US History I
LASC Categories: USW, CON
From colonization through the Civil War era. A study of politics, society, economy, diplomacy, and culture in that period.
3 Credits

WO/HI-112 US History II
LASC Categories: USW, CON
From the Civil War to 1945. A study of politics, society, economy, diplomacy, and culture in that period.
3 Credits

WO/HI-113 US History III
LASC Categories: USW
1945 to the present.
3 Credits

WO/HI-193 Special Topics in History for First Year Students
3 Credits

WO/HI-205 American Indian Past & Present
This survey covers the broad sweep of native American history and focuses on the encounter between American and European civilizations and how Native culture has adapted through the centuries.
3 Credits

WO/HI-214 Modern Latin America
The people of Latin America from independence to the present, focusing on race, sex and power.
3 Credits

WO/HI-215 American Intellectual History
Prerequisites: HI-111 HI-112
Puritanism, the Enlightenment, romanticism, Darwinism, pragmatism, fundamentalism, the liberal-progressive ethic, the new left, and neo-conservatism.
3 Credits

WO/HI-216 Economic History of the U. S.
An introduction to United States economic development; particular attention will be paid to industrialization and the labor force.
3 Credits

WO/HI-217 US Social History
LASC Categories: TLC, USW, DAC, WAC
Prerequisites: EN-102 or EN-250
Survey of social and cultural history. Topics such as family, religion, education, popular literature, architecture, transportation and reform.
3 Credits

WO/HI-226 Latin America Through Film
This course will explore how filmmakers have portrayed Latin American History in their movies.
3 Credits

WO/HI-230 Nicaragua, the US and the World
LASC Categories: USW, DAC
The course will examine the impact of globalization and imperialism on the lives of Nicaraguans at home and in the diasporic communities.
3 Credits

WO/HI-247 Central America and the Caribbean
This survey examines the political, cultural and social history of Central America and the Caribbean from pre-Columbian times to the present with an emphasis on the 20th century.
3 Credits

WO/HI-249 U S Labor History I
The relationship between workers, their employers, and the surrounding community between 1815 and World War II
Every 2-3 years. 3 Credits

WO/HI-250 Special Topics in History
Special topics at the introductory or intermediate level; especially appropriate for first and second year students.
3 Credits

WO/HI-271 Women & Work in Historical Perspective
This course undertakes to examine women's work conditions and the opposition to its continuation in Europe and America, sixteenth to nineteenth centuries.
3 Credits

WO/HI-274 Sex, Marriage and the Family
LASC Categories: TLC, DAC
Prerequisites: HI-103 HI-104 HI-111 or HI-112
This course will undertake a study of courtship, marriage and family life-cycle patterns in England and America during the 19th century
Every 2-3 years. 3 Credits

WO/HI-320 Citizen Nation
LASC Categories: CON, TLC, USW, DAC, WAC
Prerequisites: HI-111 or HI-112
Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria.
3 Credits

WO/HI-333 Women in Latin America
Prerequisites: HI-233.
Examines the roles of women in diverse societies including Mexico, Brazil and Caribbean nations. Emphasis on the modern period.
3 Credits

WO/HI-350 Native American Women
Prerequisites: HI-205.
Examines Indian women from the time of European contact to the modern era. Emphasizes culture, community and arenas of power.
3 Credits

WO/HI-353 The Age of Reform
Prerequisites: HI-111 and HI-112.
An analysis of the transformation of America, including reform response to the Gilded Age's industrialization, urbanization and immigration patterns.
3 Credits

WO/HI-372 Evolution of Women's Rights
This course analyzes the evolution of Women's Rights with emphasis on its role in the twentieth century's Inter- national Law of Human Rights.
3 Credits

WO/HI-450 Special Topics in History
Advanced special topics in history; course may be taught as an upper level seminar.
Other or on demand. 3 Credits

WO/MU-231 Women in Music
LASC Categories: TLC, CA
A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.
3 Credits

WO/NU-310 Nursing Science I
Prerequisites: NU-210, NU-216, HE-120, MA-150, and BI-206.
Students will apply the nursing process when caring for the childbearing family and adult medical-surgical patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of adult medical-surgical patients and the child-bearing family. Lecture and off-campus clinical experiences in maternal-child health nursing and medical-surgical nursing are included in this course.
4.5 Credits

WO/NU-340 Nursing Science II
LASC Categories: DAC
Prerequisites: NU-310 NU-430
Prerequisites or Corequisite: NU-315
Concepts of wellness, disease, and health behaviors are examined as the nursing process is operationalized in the care of pediatric patients and acutely ill medical-surgical patients. Lecture and an off-campus clinical experience are included in this course.
4.5 Credits

WO/NU-343 Childbearing Family Bridge II
This course provides the LPN with an introduction to the role of the bachelor's prepared registered nurse in the care of the child-bearing family, family health promotion, high risk maternal-newborn care and clinical decision making. This course places emphasis on the multisystem pediatric and family-centered issues, complex nursing assessment with community and hospital based patients and families.
5 Credits

WO/OT-400 Special Topics in Occupational Therapy
Selected areas of interest to students and instructor. Topic, prerequisites and instructor are announced in advance.
1-6 Credits

WO/PH-150 Women in Western Ideas
LASC Categories: HBS, TLC, DAC
Investigates the concept of woman from ancient Greece to the present.
3 Credits

WO/PH-240 Political Theory
LASC Categories: USW, TLC
Investigates concepts including political power, equality, revolution, liberties, slavery, socialism and liberalism, patriarchal power, race and gender.
3 Credits

WO/PH-241 Genocide and Human Rights
LASC Categories: GP, USW
This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.
3 Credits

WO/PH-250 Global Feminisms
LASC Categories: TLC, GP
Investigates the theoretical underpinnings of women's movements for equal rights around the globe.
3 Credits

WO/PO-320 Citizen Nation
LASC Categories: CON, TLC, USW, DAC, WAC
Prerequisites: HI-111 or HI-112
Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria.
3 Credits

WO/PS-191 Topics in Psychology
This course in an exploration of current and specialized topics in PSychology. It will not be counted toward the major.
3 Credits

WO/PS-215 Psychology of Adolescence
Prerequisites: PS-110
The mental, emotional, social and physical changes of contemporary adolescence are examind with emphasis on family, peer and school influences.
3 Credits

WO/PS-220 Psychology of Aging
Prerequisites: PS-110 or PS-101.
Adulthood and old age are studied with special emphasis on current developmental theories.
Every year. 3 Credits

WO/PS-255 Psych Foundations of Diversity
Prerequisites: PS-101
Explores the gender, racial/ethnic, multiple-group membership, cultural, social class, religious, disability and sexual orientation facets of diversity.
3 Credits

WO/PS-260 Psychology of Human Sexuality
Prerequisites: PS-101.
Sexuality as a foundation of personality. The wide range of human sexuality is explored; sexual development, roles, attitudes and behaviors.
3 Credits

WO/PS-263 Psychology of Women
Prerequisites: PS-101.
Women's psychological development throughout the lifespan will be examined, including female development, achievement, stereotyping, stress, violence and psychological disorders.
3 Credits

WO/PS-295 Special Topics: Psychology
Prerequisites: PS-110/PS-111 or PS-101.
Selected areas of mutual interest to instructor and students. Topics and prerequisites are announced in advance.
3 Credits

WO/PS-312 Psychology of Adolescence
LASC Categories: HBS
Prerequisites: PS-101 and PS-210.
The mental,emotional, social and physical changes of contmeporary adolescence are examined with emphasis on family, peer and school influences.
3 Credits

WO/PS-315 Physical and Sexual Abuse
Prerequisites: PS-101.
Etiology, characteristics, consequence, treatment and prevention of various forms of physical, sexual and emotional abuse in children, adolescents and adults.
3 Credits

WO/PS-335 Abnormal Psychology
Prerequisites: PS-101.
Etiology, dynamics and treatment of psychopathology and their relation to normal personality are considered from traditional and contemporary perspectives.
3 Credits

WO/PS-400 Internship in Psychology
Provides opportunity to advanced students to increase experience through internship with sponsoring commuity organization, institution, or business under appropriate supervision.
1-3 Credits

WO/PS-410 Sem: Developmental Psychology
Prerequisites: PS-101 and either PS-210 or PS-312
Patterns of physical, mental and emotional development are explored with emphasis on independent work.
Every year. 3 Credits

WO/PS-492 Capstone Seminar in Mental Health
LASC Categories: CAP
Prerequisites: PS-330 PS-335 PS-340 PS-435 and one course from PS-400, PS-318, or PS-315
A capstone course dealing with recent and emerging topics, issues, and methods in mental health. Content and format varies with instructor.
3 Credits

WO/SO-100 Introduction to Sociology
The nature of group behavior and social interaction viewed through analysis of the structure, norms, and values of human groups.
3 Credits

WO/SO-130 Race, Ethnicity and Gender
An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination
Other or on demand. 3 Credits

WO/SO-199 Special Topics
Introductory level topics. Topic announced at pre-registration.
3 Credits

WO/SO-215 Medical Sociology
Prerequisites: SO-100 SO-110 SO-130 SO-190 or SO-199
The structure of health care delivery systems and role interaction between levels of health care personnel, patients, and families of patients.
Every year. 3 Credits

WO/SO-220 Sociology of the Family
Prerequisites: SO-100 or SO-110
A comparative approach to the study of the structure of family systems with emphasis on changing patterns of family life.
3 Credits

WO/SO-240 Sociology of Education
Prerequisites: SO-100.
Study of modern educational systems, emphasizing the social, political and economic factors that influence its organization and its functions.
3 Credits

WO/SO-285 Race, Class and Gender
LASC Categories: DAC, HBS
An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination.
3 Credits

WO/SO-299 Special Topics
Intermediate level topics.
3 Credits

WO/SO-300 Social Change
Prerequisites: two sociology courses at the 200+ level.
A study of the conditions, patterns, and consequences of social transformation with emphasis on institutional and individual patterns of adjustment and adaptation.
3 Credits

WO/SO-330 Criminology
Prerequisites: 2 Sociology courses at the 200-level.
Theoretical perspective on crime, criminals and the social aspects of interrelationships within, and between the components of the criminal justice system.
3 Credits

WO/SO-350 Social Stratification
Prerequisites: EN-102 and two courses at 200 level
Investigation of the recurrent patterns of social differentiation, social ranking, and the unequal distribution of rewards.
Every 2-3 years. 3 Credits

WO/SO-355 Gender and Sexuality
LASC Categories: HBS, ICW, DAC
This course introduces the sociologist study of gender and sexuality. This course examines how social institutions and cultural norms construct particular gender roles and sexual identities within society.
3 Credits

WO/SO-375 Contemporary Social Theory
Prerequisites: SO-270
Review of sociological theories, analytical tools, and conceptual schemes prevalent in contemporary debate and consensus.
3 Credits

WO/SO-420 Sem: Sociology
Advanced study topics in selected areas of Sociology.
1-3 Credits

WO/SP-191 Special Topics in Spanish
An introductory leve course in Spanish on current or specialized topics.
3 Credits

WO/SP-401 Advanced Study:Special Topics
Special topics in language, literature, civilization or field work of mutual interest to student and instructor. For advanced students.
1-6 Credits

WO/TH-321 Rehearsal and Performance
Prerequisites: Admission by audition
Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.
Every year. 3 Credits

WO/TH-399 Special Topics in Theatre
Will include study of topics on an as needed basis.
3 Credits

WO/UR-101 Introduction to Urban Studies
LASC Categories: HBS, USW
broad contextual overview of urban life that examines the relationship of people to their environment from an interdisciplinary perspective.
3 Credits

WO/UR-103 Introduction to Women's Studies
LASC Categories: DAC, ICW, HBS
This course uses a variety of academic disciplines to study the situation of women around the world.
3 Credits

WO/UR-191 Special Topics in Urban Studies
This introductory level course will cover topics in Urban Studies which are of special interest to first-year students.
3 Credits

WO/UR-202 Aging in Metropolitan Society
An introduction to gerontology stressing the social, economic and political aspects of aging in the urban enviroment.
3 Credits

WO/UR-212 American Metropolitan Evolution
LASC Categories: USW, WAC
Prerequisites: UR-101
Development of metropolitan America from a multi-disciplinary approach with emphasis upon dynamics of urban growth, internal development of cities, immigrations, socio-economic stratification, metropolitanization, and problems deriving from growth.
3 Credits

WO/UR-213 Human Identity and the Urban Environment
Prerequisites: UR-101
Study of factors affecting identity in contemporary urban settings including race, ethnicity, class, age, and sex categories and roles.
3 Credits

WO/UR-216 Women and Aging in the Urban Environment
Investigation of the Aging process for women in urban society, focusing on their great longevity, lower income status, and major care giving role.
3 Credits

WO/UR-290 Gender and the City
LASC Categories: WAC, GP, HBS
Exploration of the ways in which gender, both male and female, structures responses of individuals to urban life and spaces.
Every 2-3 years. 3 Credits

WO/UR-301 Cities and Suburbs
Prerequisites: UR-101
Multi-disciplinary study of city and suburban growth patterns and problems both of the past, and that hamper metropolitan cooperation and affect the quality of life for city and suburban residents and businesses.
3 Credits

WO/UR-353 Aging in a Global Society
LASC Categories: GP, DAC
Explores the ramifications of unrelenting Global Aging, focusing on the questions, what are old people for and the connections across generations.
3 Credits

WO/UR-360 Environmental Systems and Public Policy
Prerequisites: UR-101.
Examination of urban ecosystems, focusing on land uses designed to effectively utilize water, open space, and other natural resources.
3 Credits

WO/UR-380 Public Policy& Cult Diversity
LASC Categories: HBS, USW
Prerequisites: UR-101.
This course will examine contemporary policy issues and problems deriving from cultural diversity. These will include areas such as immigration, population, demographics,affirmative action, public assistance, integration, separatism, political correct- ness, gender equality, and the role of organized religion in contempoary politics.
3 Credits

WO/UR-421 Special Topics:Urban Studies
Prerequisites: UR-101
In-depth examination of topical issues challenging the intellectual and creative interests of advanced students in urban studies.
3 Credits

WO/UR-422 Sel Topics: Gerontology
In-depth examination of topical issues in gerontology which afford the advanced student the opportunity to pursue gerontological research.
3 Credits

School of Education, Health, and Natural Sciences

Dean
Dr. Linda S. Larrivee

Location
Kalyan K. Ghosh Science and Technology Building
First Floor, Room ST-101

Departments

- Biology (p. 124)
- Chemistry (p. 145)
- Communication Sciences and Disorders (p. 155)
- Computer Science (p. 161)
- Earth, Environment, and Physics (p. 249)
- Education (p. 171)
- Health Sciences (p. 206)
- Mathematics (p. 217)
- Nursing (p. 229)
- Occupational Studies (p. 242)

Centers

- Aisiku STEM Center
- Center for Interdisciplinary Health Studies and Practice
- Center for Prek-12 Initiatives
- Math Center
- Speech-Language-Hearing Center

Biology

Department of Biology

The Biology program provides students with a broad knowledge in the biological sciences through a core curriculum and upper-level courses in specialized areas of study. A hands-on approach for teaching laboratory techniques and field work is emphasized. Throughout the program, students are encouraged to develop effective communication skills and an awareness of the societal and global implications of biology. Students may pursue a major in Biology, a minor in Biology or Psychobiology, or concentrations in Nuclear Medicine Technology or Bioinformatics. In addition, the pre-requisites necessary to meet the requirements of medical, dental, veterinary, optometry, nurse practitioner, physician assistant, physical therapy, and pharmacy programs may be satisfied through the biology major. The Accelerated Pharmacy Program with MCPHS also can be completed through the Biology major.

Undergraduate biology majors who have demonstrated academic excellence and an interest in biological research may participate in the Honors in Biology program. The Chi Iota Chapter of the national biological honor society, Beta Beta Beta provides recognition to outstanding students majoring in Biology and Biotechnology.

- Biology (p. 130)
- Honors Program in Biology (p. 132)
- Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science (p. 133)
- Major in Biology, Concentration in Bioinformatics (p. 134)
- Major in Biology, Concentration in Nuclear Medicine Technology (p. 135)
- Minor in Biology (p. 136)
- Psychobiology Minor (p. 136)

Faculty

Latifeh Amini-Kormi, Professor (1994), B.S. Tehran University; Ph.D. University of Pennsylvania

Daron C. Barnard, Professor (2006), B.A. Middlebury College; Ph.D. Vanderbilt University

Nirvana Filoramo, Assistant Professor (2011), B.S. University of Massachusetts, Amherst; M.S. Iowa State University; Ph.D. University of Connecticut

Ellen F. Fynan, Professor (1993), B.S. University of Maine; Ph.D. Thomas Jefferson University

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Assistant Professor (2014), B.S. Western Kentucky University; Ph.D. University of Wisconsin-Madison

Aleel K. Grennan, Assistant Professor (2017), B.S. University of Massachusetts; M.S., Ph.D. University of Illinois

Jennifer Hood-DeGrenier, Associate Professor (2012), B.A. Williams College; Ph.D. Harvard University

Ana Bastos Barros Neto, Instructor (2017), B.S., University of Coimbra; Ph.D., University Pablo de Olavide - Seville, Spain and University of Porto, Porto, Portugal

Steven J. Oliver, Department Chair, Professor (2003), B.A. University of Montana; Ph.D. Boston University

Maura Pavao, Professor (2001), B.S. Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

Antonieto S. Tan, Professor (1993), B.S., M.S. University of San Carlos; Ph.D. University of Southern Mississippi

Randall Tracy, Professor (2003), B.S.,M.S. University of Connecticut; Ph.D. Arizona State University

Sebastian Velez, Associate Professor (2012), B.S. University of Puerto Rico; M.S. University of Notre Dame; Ph.D. Harvard University

PB-200 Introduction to Psychobiology
LASC Categories: HBS, NSP
Prerequisites: PS-101 and BI-116 or BI-140.
Introductory course in Psychobiology that covers topics including neurobiology, evolution, sensory/motor systems, learning and memory, and social behavior.
Spring only and every year. 4 Credits

PB-400 Capstone in Psychobiology
LASC Categories: CAP
Seminar covering selected topics in Psychobiology including primary source material readings, laboratory activities, discussion, oral presentation and written papers.
Spring only and other or on demand. 2 Credits

Biology Courses (Undergraduate)

See LASC section for information on the Liberal Arts and Sciences Curriculum (LASC).

BI-101 Concepts of Biology
LASC Categories: LAB, NSP
Unifying principles in biology; diversity and evolution of plant and animal life at cellular and organismic levels. Three lecture hours and a two-hour laboratory per week.
Fall and Spring and every year. 4 Credits

BI-103 The Human Animal
LASC Categories: NSP
A general survey of the structure and function of human body systems from the biochemical and cellular basis of life to evolution of the human body and the organization of organs and organ systems, including the biological basis of selected disease states.
Every year. 3 Credits

BI-104 The Human Animal Laboratory
LASC Categories: NSP, LAB
Prerequisites or Corequisite: BI-103
This course is the lab to accompany The Human Animal, a general survey of the structure and function of human body systems from the biochemical and cellular basis of life to evolution of the human body and the organization of organs and organ systems, including the biological basis of selected disease states.
Every year. 1 Credit

BI-111 Social Biology
LASC Categories: HBS, NSP
This course considers the interface between current biological technologies and the social, cultural, legal, and moral postures of modern man.
Every year. 3 Credits

BI-112 Diseases and Mankind
LASC Categories: GP, NSP
Diseases of ancient and modern man; the impact on history, religion, science, art and philosophy.
Spring only and every year. 3 Credits

BI-114 Plants and Human Affairs
LASC Categories: GP, NSP
Man's dependence upon plants and their influence on civilization and its art, religions, literature, folklore, medicine, and human behavior.
Spring only and every 2-3 years. 3 Credits

BI-116 Animal Biology
LASC Categories: LAB, NSP
Survey of animal kingdom with emphasis on animal diversity, morphology, life histories, ecological evolutionary relation- ships. No credit for Biology major. Three lecture hours and two labratory hours per week.
Fall and Spring. 4 Credits

BI-117 Humans and the Environment
LASC Categories: LAB, NSP
A survey of Anthropologic environmental impacts and the underlying mechanisms involved. Three lecture hours and three laboratory hours per week.
Other or on demand. 4 Credits

BI-118 Dinosaurs
LASC Categories: NSP, LAB
A survey of dinosaurs; their evolution, anatomy, diversity and impact on evolutionary biology. discussions of the changing views of dinosaurs in the media and public consciousness. Three hours lecture and two hors lab.
Every 2-3 years. 4 Credits

BI-120 Darwinian Revolution
LASC Categories: TLC, NSP
An interdisciplinary perspective on the philosophical, religious, and social impacts of Darwin's theory of evolution by the process of natural selection. [Formerly BI370.]
Every 2-3 years. 3 Credits

BI-130 Field Biology
LASC Categories: GP, NSP, LAB
Study-Abroad Field Biology course for non-Biology majors. Course explores the intersection of human activities and environmental preservation, with a basic introduction to topics in organismal biology, biodiversity and biogeography.
Spring only and every year. 4 Credits

BI-140 Introduction to Organismal Biology
LASC Categories: LAB, NSP
Evolution, ecology, anatomy, physiology and diversity of organisms. Three hours lecture and three hours lab each week. Intended for STEM Majors.
Every year. 4 Credits

BI-141 Intro to Cellular and Molecular Biology
LASC Categories: NSP, LAB
Prerequisites: CH-120.
Prerequisites or Corequisite: CH-121
Cellular and molecular concepts in biology. Emphasis on the structure and varied functions of the cell. Three lecture hours and three laboratory hours per week. Intended for STEM Majors.
Every year. 4 Credits

BI-161 Human Anatomy and Physiology I
LASC Categories: NLL
Considers human cellular biology, tissues, integumentary, nervous, endocrine, skeletal, muscular systems. Three hours of lecture and a three-hour laboratory per week.
Every year. 4 Credits

BI-162 Human Anatomy and Physiology II
LASC Categories: LAB, NSP
Prerequisites: BI-161.
Considers digestive, respiratory, cardiovascular, urinary, immune and lymphatic systems; water and electrolyte balance, reproduction and embryology. Three lecture hours and three laboratory hours per week.
Spring only and every year. 4 Credits

BI-193 First Year Seminar Biology
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

BI-199 Selected Topics: Biological Sciences
Each topic is a lecture and/or a laborotory course in a selected area of the biological sciences presented by a departmental instructor, Topics will be announced in advance.
Every 2-3 years. 1-4 Credits

BI-200 Human Biology
LASC Categories: NLL
Prerequisites: BI-140 and BI-141 or PB-200.
A systemic approach to the study of human biology. The course will emphasize structure/function relationships and homestatic mechanisms. Three hour lecture and three hour lab.
4 Credits

BI-202 Principles of Ecology
LASC Categories: NLL, WAC
Prerequisites: BI-140, EN-102, MA-150 or MA-180, or MA-190, or MA-200.
Basic ecological theory relating to organism-environment interactions; population dynamics, and ecosystems. Three hours of lecture and a three-hour laboratory per week.
Every year. 4 Credits

BI-203 Genetics
LASC Categories: NLL, QAC
Prerequisites: BI-141. Must have a minimum Accuplacer score of 3.
Introductory genetics with examples of human inheritance and recent developments in genetic engineering. Three hours of lecture and a three-hour laboratory per week.
Spring only and every year. 4 Credits

BI-204 Microbiology
LASC Categories: NLL
Prerequisites: BI-141 and CH-121.
The cytology, metabolism, and genetics of bacteria. Immune responses and control of microorganisms are stressed. Three lectures and a three-hour laboratory per week. (Prerequisites: Introductory chemistry and biology courses)
Fall and Spring and every year. 4 Credits

BI-205 Research Techniques and Experimental Design
Prerequisites: BI-141, and MA-150.
Investigations in experimental design and research mothodologies required fo rthe Honors program in Biology.
Every year. 2 Credits

BI-206 Medical Microbiology
LASC Categories: NSP, LAB
Prerequisites: BI-161 and either CH-112 or CH-120.
A study of growth and control of pathogenic microorganisms with emphasis on infectious disease transmission, immune responses, prevention and treatment. Three lecture and three laboratory hours per week.
4 Credits

BI-207 Public Health Microbiology
Prerequisites: BI-161 and CH-112.
Growth and control of pathogenic microorganisms with emphasis on infectious disease transmission, immune responses, prevention and treatment for Public Health Majors.
Every year. 3 Credits

BI-215 Neuroscience
LASC Categories: NLL
Prerequisites: BI-161 and BI-162
Structural and functional organization of the human nervous system with a focus on clinical applications. Three lecture hours and three laboratory hours per week.
Every year. 4 Credits

BI-240 Research Experience
Lab and/or field based research on a specific research topic under the supervision of a faculty member.
1-6 Credits

BI-271 Basic Kinesiology
LASC Categories: NSP
Prerequisites: BI-161.
Structure and function of human skeletal muscles in relation to motion and general body mechanics under normal and stress conditions.
Every year. 3 Credits

BI-301 Topics in Invertebrate Zoology
LASC Categories: NLL
Prerequisites: BI-140 and BI-202.
Considers anatomy, taxonomy (including selected articles of the international code of zoological nomenclature), natural history, and evolutionary relationships of selected invertebrate phyla. Three hours of lecture and a three-hour laboratory per week.
Spring only and every 2-3 years. 4 Credits

BI-303 Parasitology
LASC Categories: NLL
Prerequisites: BI-140 and either BI-200 or BI-161 and BI-162.
Basic concepts in symbiology, life cycles, epidemiology, disease development, control and prevention of selected human parasites. Three hours of lecture and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-304 Comparative Vertebrate Anatomy
LASC Categories: NLL
Prerequisites: BI-140 and either BI-200 or BI-161 and BI-162.
Considers prochordate and chordate taxonomy and phylogeny; systematic morphological comparison of representative chordates to establish homology, analogy, and evolution. Three lecture hours and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-306 Developmental Biology
LASC Categories: NLL
Prerequisites: BI-141 and BI-203.
Study of developmental patterns, cullular differentiation and cell interactions resulting in cellular diversity, organization, and perpetuation of the germ line. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

BI-313 Histology
LASC Categories: NLL
Prerequisites: BI-141 and either BI-200 or BI-161 and BI-162.
The structure and function of animal tissues. Each student is required to prepare tissues using histological methods. Three hours of lecture and a three-hour laboratory per week.
Spring only and every 2-3 years. 4 Credits

BI-315 Comparative Neurobiology
LASC Categories: NLL
Prerequisites: BI-161 and BI-162 or BI-200 or PB-200.
Structural and functional organization of the central and peripheral nervous system. Principles of normal and abnormal transmission, integration, and storage of information in neuronal pathways. Three hours of lecture and a three-hour laboratory per week.
Spring only and every year. 4 Credits

BI-321 Comparative Physiology
LASC Categories: NLL
Prerequisites: BI-140, BI-141, and either BI-200 or BI-161 and BI-162.
A comparison of select physiological functions of different animal taxa with mammals used as a reference. Three lecture hours and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-324 Endocrinology
LASC Categories: NLL
Prerequisites: BI-140, BI-141, and BI-200 or BI-161/162
The role of endocrine glands in the normal integration of animals; mechanisms of hormone action, function, and interrelationships. Three hours of lecture and a three-hour laboratory per week.
Spring only and every 2-3 years. 4 Credits

BI-331 Marine Biology
LASC Categories: NLL
Prerequisites: BI-140 and BI-202.
Considers the marine environment, its flora and fauna, distribution and production of plankton-nekton-benthos, zoogeography, bioeconomic factors and potential. Three lecture hours and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-333 Topics in Vertebrate Zoology
LASC Categories: NLL
Prerequisites: BI-140 and BI-202.
Life histories, adaptations, distribution, systematics, and economic importance of selected vertebrates taxa. Each semester will focus on a particular taxon. Three hours of lecture and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-334 Wildlife Biology
LASC Categories: NLL
Prerequisites: BI-140 and BI-202.
Theory and Practice of wildlife management. Considers procedures for collection and analysis of field and laboratory data on vertebrate game populations useful to wildlife biologists. Three hours of lecture and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-340 Plant Sciences
LASC Categories: NLL
Prerequisites: BI-140, BI-141, and BI-202.
Morphology, anatomy, physiology of flowering plants with studies on life cycles, ecological relationships, biochemical processes and evolution of plant diversity. Three lecture hours and three laboratory hours per week.
Spring only and other or on demand. 4 Credits

BI-341 Mycology
LASC Categories: NLL
Prerequisites: BI-141 and BI-204.
The morphology, cytology, and evolution and classification of the fungi. Three hours of lecture and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-344 Soil Biology
LASC Categories: NLL
Prerequisites: BI-140, BI-141, BI-204, CH-120, and CH-121.
Includes study of nutrient cycling, relations between plants, animals, and microbes, ecology of polluted soils and soil biotechnology. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

BI-352 Symbiosis and Evolution
LASC Categories: NLL
Prerequisites: BI-140, BI-141, and BI-204.
Origin and nature of microbial life, evolution of multicellular organisms and the central role played by biological symbioses. Lecture and laboratory.
Fall and Spring. 4 Credits

BI-360 Animal Behavior
LASC Categories: NLL
Prerequisites: BI-140 and BI-202.
4 Credits

BI-371 Molecular Biology
LASC Categories: NLL
Prerequisites: BI-141 and BI-203, or BI/CH-410.
Emphasis on the molecular biology of the gene. Topics include structure, function, replication, transcription, recombination, mutability, repair and regulation of DNA. Three hours of lecture and a three-hour laboratory per week.
Every 2-3 years. 4 Credits

BI-372 Immunology
LASC Categories: NLL
Introduction to cellular defense mechanisms in health and disease; antigen-antibody reactions, human immune responses. Three lecture hours and three laboratory hours per week.
Spring only and every 2-3 years. 4 Credits

BI-375 Virology
LASC Categories: NLL
Prerequisites: BI-140, BI-141, and BI-204.
Physical structure and replication schemes of viruses; role of viruses in human disease, research and commercial applications. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

BI-380 Biodiversity and Conservation Biology
LASC Categories: LAB
Prerequisites: BI-140, BI-141, BI-202, and BI-203.
A theoretical and quantitative approach to species, genetic, ecosystem and community diversity in the context of modern conservation biology principles. Three lecture hours and three laboratory hours per week.
Other or on demand. 4 Credits

BI-398 Cancer Biology
Prerequisites: BI-141 and BI-203
Cellular and molecular basis of cancer, including cancer genetics, biochemical pathways related to cancer, and modern traetment approaches.
4 Credits

BI-399 Biochemical Regulatory Mechanisms
LASC Categories: NLL
Prerequisites: BI-141 and BI-203 or take BI-410 or CH-410
Examination of the many biochemical mechanisms that regulate gene expression and protein function, with an investigative lab project. Three lecture hours and three laboratory hours per week.
Other or on demand. 4 Credits

BI-401 Selected Topics: Biological Sciences
Each topic is a lecture and/or laboratory course in a selected area of the biological sciences presented by a departmental instructor and/or guest lecturers when appropriate. Topic to be announced in advance.
Other or on demand. 1-4 Credits

BI-402 Independent Study: Biology
Advanced semi-independent study (by qualified upper-level biology majors) of an approved biological problem. Faculty supervision required. (May not be used for major requirements.)
Fall only and every year. 1-6 Credits

BI-403 Internship: Biology
Intended for qualified, upper-level biology majors. Faculty advisor required. (May not be used for major requirements.)
Fall and Spring and other or on demand. 1-6 Credits

BI-404 Biology Seminar
LASC Categories: CAP
Prerequisites: BI-202, BI-203, BI-204, BI-200 or BI-161 BI-162. Senior Standing also required
Preparation and presentation of biological topics, chosen with the advice and consent of a faculty advisor.
Fall and Spring and every year. 2 Credits

BI-408 Directed Study: Biology
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
1-3 Credits

BI-410 Biochemistry I
LASC Categories: NLL
The chemistry of proteins, nucleic acids, carbohydrates, and lipids; enzymes, biological oxidations; and correlations in intermediary metabolism. Three hours of lecture and a three-hour laboratory per week. [Cross listed as CH410.]
Every 2-3 years. 4 Credits

BI-411 Biochemistry II
LASC Categories: NLL
The generation and storage of metabolic energy; biosynthesis of macromolecular precursors, DNA, RNA, and protein; and biochemical regulation. Three hours of lecture and a three-hour laboratory per week. [Cross listed as CH411.]
Every 2-3 years. 4 Credits

BI-430 Field Biology
Study-Abroad Field Biology course for Biology majors. Course explores the intersection of human activities and environmental preservation, with an in-depth discussion of topics in organismal biology, ecology, biodiversity and biogeography.
4 Credits

BI-440 Advanced Research Experience for Undergraduates
Advanced lab and/or field based research on a specific research topic under the supervision of a faculty member.
Fall and Spring. 1-6 Credits

BI-451 Nuclear Instrumentation I
Structure, functions, and interactions of particulate and non-particulate radiations with matter, detection, calibration, dosage, and statistical methods. Consent of NMT Coordinator. [Cross listed as PY 451.]
Every year. 4 Credits

BI-452 Nuclear Instrumentation II
Designed to further the skills of operating, calibrating and performing routine maintenance on scanners, gamma cameras, well counters, and liquid scintillation counters. Consent of NMT coordinator. [Cross listed as PY 452.]
Spring only and every year. 4 Credits

BI-453 Radiopharmaceuticals
Fundamental concepts of radiopharmaceutical production and use including basic radiochemistry. Consent of NMT coordinator. [Cross listed as PY 453.]
Spring only and every year. 4 Credits

BI-461 NMT Clinical Practicum I
Students will spend several days a week in a hospital observing the ongoing activities and procedures of a nuclear medicine facility. Consent of NMT coordinator. [Continues as BI 462; formerly BI 454.]
Every year. 4 Credits

BI-462 NMT Clinical Practicum II
Students will spend several days a week in a hospital observing the ongoing activities and procedures of a nuclear medicine facility. Consent of NMT coordinator. [Continues as BI 461; formerly BI 454.]
Every year. 4 Credits

BI-463 NMT Clinical Practicum III
Guided and supervised by clinical instructors, students begin to acquire manual skills essential to nuclear medicine technology, and in performing all routine nuclear medicine examination and laboratory procedures. Consent of NMT instructor. [Formerly BI 455.]
Every year. 6 Credits

BI-464 NMT Clinical Practicum IV
Upon completion of this practicum, students should be skilled in performing both routine and non-routine nuclear medicine examinations and laboratory procedures. Consent of NMT coordinator. [Formerly BI 456.]
Every year. 8 Credits

BI-465 Clinical NMT I
Considers why a specific test is indicated; which radiopharmaceutical is preferred; and how the basic image appearance, and/or numerical data may be altered by pathological states. Consent of NMT coordinator. [Cross listed as CH 465; formerly BI/CH 457.]
Every year. 4 Credits

BI-466 Clinical NMT II
Case presentations using formulas, charts, tables, and calculations to arrive at examination parameters such as dose, number of counts, speed of instrument, etc. Consent of NMT instructor. [Cross listed as CH 466; formerly BI/CH 458.]
Every year. 4 Credits

Biology

Requirements for a Major in Biology

Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Total Credits		67

Students who also complete CH-203 and CH-204 can earn a chemistry minor.

Biology Upper-Level Electives

Cellular & Molecular Pathways		(56 credits)
BI-306	Developmental Biology	4
BI-313	Histology	4
BI-324	Endocrinology	4

BI-341	Mycology	4
BI-371	Molecular Biology	4
BI-372	Immunology	4
BI-375	Virology	4
BI-398	Cancer Biology	4
BI-399	Biochemical Regulatory Mechanisms	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-377	Fermentation Technology	4
BT-378	Bioinformatics	4
BI/CH-410	Biochemistry I	4
Organismal & Ecological Systems		(52 credits)
BI-301	Topics in Invertebrate Zoology	4
BI-303	Parasitology	4
BI-304	Comparative Vertebrate Anatomy	4
BI-315	Comparative Neurobiology	4
BI-321	Comparative Physiology	4
BI-331	Marine Biology	4
BI-333	Topics in Vertebrate Zoology	4
BI-334	Wildlife Biology	4
BI-340	Plant Sciences	4
BI-344	Soil Biology	4
BI-352	Symbiosis and Evolution	4
BI-360	Animal Behavior	4
BI-380	Biodiversity and Conservation Biology	4

(Note: Pre-med and graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202)

A minimum of three upper division laboratory courses (BI 300- or BI 400-level) are to be selected. Students must take at least one course from each category. Additional upper level elective courses or graduate research/internships are strongly encouraged. The courses should be selected with the advice and consent of the faculty advisor. A grade point average of 2.0 must be maintained in biology courses and in the ancillary science and mathematics courses. Students considering graduate and professional work should take, as a recommended minimum, calculus and introduction to computer science.

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
BI-140	Introduction to Organismal Biology	4
CH-120	General Chemistry I	4
EN-101	English Composition I [1]	3
MA-190	Pre-calculus	4
LASC	First-Year Seminar (p. 53)	3
	Credits	18
Semester Two		
BI-141	Intro to Cellular and Molecular Biology	4
CH-121	General Chemistry II	4
EN-102	English Composition II [1]	3
MA-150	Statistics I	3
	Credits	14
Year Two		
Semester Three		
BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture) [5]	3
LASC [4]	LASC Elective (ICW) (p. 58)	3
LASC [4]	LASC Elective (CON) (p. 49)	3
LASC [4]	LASC Elective (USW) (p. 61)	3
	Credits	16
Semester Four		
BI-203	Genetics	4
CH-202	Organic Chemistry II (lecture) [5]	3
LASC [4]	LASC Elective (GP) (p. 54)	3
LASC [4]	LASC Elective (CA) (p. 50)	3
SELECT	General Elective	3
	Credits	16
Year Three		
Semester Five		
BI-202	Principles of Ecology	4
PY-221	General Physics I [6,7]	4
LASC [4]	Ancillary or LASC Distribution (p. 47)	3
LASC [4]	LASC Elective (TLC) (p. 63)	3
	Credits	14

Semester Six		
BI-200	Human Biology [4]	4
BI-3XX+	300 or 400 Major Elective	
PY-222	General Physics II [6]	4
LASC [4]	LASC Elective (HBS) (p. 56)	3
	Credits	11
Year Four		
Semester Seven		
BI-3XX+	300 or 400 Major Elective Lab	4
BI-3XX+	300 or 400 Major Elective Lab	4
LASC [4]	LASC Elective (p. 47)	3
SELECT	General Elective	3
	Credits	14
Semester Eight		
BI-3XX+	300 or 400 Major Elective Lab	4
BI-404	Biology Seminar [8]	2
SELECT	Additional Science	4
SELECT	General Elective	3
	Credits	13
	Total Credits	116

1 EN-101 and EN-102 satisfy LASC Writing.

2 MA-190 requires an Accuplacer score of 6 or higher.

3 MA-150 requires an Accuplacer score of 4 or higher.

4 The sequence of LASC courses is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

5 Pre-med and Graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202. 200 level Biology courses may be taken in any order.

6 Physics Requirements: PY-221 & PY-222 OR PY-241 & PY-242 satisfies LASC NSP.

7 BI-161/BI-162 can not substitute for BI-200.

8 All biology core courses must be completed before taking BI-404 (BI-140, BI-141,BI-200, BI-202, BI-203, BI-204).

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Honors Program in Biology

The Honors Program in Biology is designated as a distinction bestowed on those outstanding undergraduate Biology majors who have demonstrated distinct competence in overall biology course work and who have completed an independent research project of substantial merit. This program offers motivated students the opportunity to develop research and communication skills in preparation for graduate school or a professional career.

Requirements for the Honors Program in Biology

Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Honors Program Requirements		(3-8 credits)
BI-205	Research Techniques and Experimental Design	2

BI-440	Advanced Research Experience for Undergraduates	1-6
Total Credits		70-75

[1] "Commendation in Biology" requires 3 credits of BI-440 and a minimum 3.0 GPA in biology courses. "Honors in Biology" requires 5 credits of BI-440 and a minimum of 3.5 GPA in biology courses.

Students who also complete CH-203 and CH-204 can earn a chemistry minor.

For more information and specific program requirements, contact Dr. Randall Tracy in the Department of Biology.

Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science

Requirements for a Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science

Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Accelerated Pharmacy Program		(4 credits)
CH-203	Organic Chemistry Laboratory I	2
CH-204	Organic Chemistry Laboratory II	2
Total Credits		71

Department of Biology: WSU/ MCPHS 3+3 Curriculum Guide for Biology Majors Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I	3
CH-120	General Chemistry I	4
BI-140	Introduction to Organismal Biology	4
LASC	First-Year Seminar (p. 53)	3
MA-200	Calculus I	4
	Credits	18
Semester Two		
EN-102	English Composition II	3
CH-121	General Chemistry II	4
BI-141	Intro to Cellular and Molecular Biology	4
MA-201	Calculus II	4
LASC [1]	LASC Elective (Constitutions) (p. 49)	3
	Credits	18
Year Two		
Semester Three		
BI-203	Genetics	4

CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
PY-221 or PY-241	General Physics I [2] or Physics I (Mechanics)	4
LASC	Distribution Elective (HBS) (p. 56)	3
	Credits	16
Semester Four		
BI-204	Microbiology	4
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	5
PY-222 or PY-242	General Physics II [2] or Physics II (Electricity, Magnetism and Optics)	4
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	16
Year Three		
Semester Five		
BI-200	Human Biology	4
MA-150	Statistics I	3
LASC	Distribution Elective (USW) (p. 61)	3
LASC	Distribution Elective (GP) (p. 54)	3
BI-202	Principles of Ecology (WAC)	4
	Credits	17
Semester Six		
LASC	Distribution Elective (CA) (p. 50)	4
BI-404	Biology Seminar	2
Optional	Upper Level Elective (Optional)	4
LASC	Distribution Elective (TLC) (p. 63)	3
LASC	LASC Elective (DAC) (p. 51)	3
	Credits	16
	Total Credits	101

1 **Winter session or Summer after 1st and 2nd years:** one course that meets LASC requirements (6 credits total). LASC requirements should include: Introduction to Psychology, Introduction to Sociology, a course that fulfills the Constitutions, Economics, and an upper level (beyond first semester) behavioral science (Psychology or Sociology).

2 PY-241 and can be taken in place of PY-221 andPY-222, however these should be taken concurrently with or after calculus. The 200 level Biology courses may be taken in any order.

Note: Total Credits taken at WSU=105. Remaining credits are transferred from MCPHS and fulfill upper level biology electives.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Major in Biology, Concentration in Bioinformatics

The purpose of this interdisciplinary concentration is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling including genomics and proteomics. With the ever increasing number of fully sequenced genomes, including the human genome, databases such as GenBank and EMBL have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. Questions of gene expression have led to computational biology, the process of analyzing genomic sequences and to the field of proteomics, the understanding of protein structure and function. The information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases. Major drug and biotechnology companies are seeking people trained in bioinformatics.

Requirements for a Major in Biology, Concentration in Bioinformatics

Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Concentration in Bioinformatics		(20 credits)
In addition to the requirements for the Major in Biology:		
BT-378	Bioinformatics [1]	4
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-242	Data Structures	3
CS-282	Unix Systems Programming	3
CS-265	Database Applications	3
Total Credits		87

[1] BT-378 Bioinformatics fulfills an upper division Cellular/Molecular Biology elective. (requires BI-203 as a prerequisite)

Major in Biology, Concentration in Nuclear Medicine Technology

Worcester State University offers, in conjunction with the University of Massachusetts Medical School, a concentration in Nuclear Medicine Technology (NMT), administered by a program advisory committee and accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

Nuclear medicine is a study of techniques developed in hospitals, particularly in radiology, pathology, and internal medicine departments. These techniques are used for both diagnostic and therapeutic purposes. The program is limited to a relatively small number of students.

This program is being discontinued at the end of the 2017-2018 academic year. No new students are being accepted into this program.

The nuclear medicine technology program at Worcester State University is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 820 W. Danforth Rd. #B1, Edmond OK 73003; phone 405-285-0546; email mail@jrcnmt.org; http://www.jrcnmt.org. This program is currently on probation but it is accredited. For more information go to http://jrcnmt.org/news/other-news-documents/ and refer to the appropriate Accreditation Action Report. Information on recent examination pass rates is available here.

Requirements for a Major in Biology, Concentration in Nuclear Medicine Technology

Prerequisites for the program include successful completion of:

BI-161 & BI-162	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
CH-120 & CH-121	General Chemistry I and General Chemistry II	8

PY-221 & PY-222	General Physics I and General Physics II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8

Requirements

Math Requirement		(7-8 credits)
Two math courses based on Accuplacer scores and Departmental Major Requirements selected as a minimum from the following:		7-8
MA-180	Introduction to Functions	
MA-190	Pre-calculus	
MA-200	Calculus I	
MA-201	Calculus II	
Technical Speciality Courses		(42 credits)
Introduction and Hospital Orientation (no credit)		
BI/PY-451	Nuclear Instrumentation I	4
BI/PY-452	Nuclear Instrumentation II	4
BI-461	NMT Clinical Practicum I	4
BI-462	NMT Clinical Practicum II	4
BI-463	NMT Clinical Practicum III	6
BI-464	NMT Clinical Practicum IV	8
BI/CH-453	Radiopharmaceuticals	4
BI/CH-465	Clinical NMT I	4
BI/CH-466	Clinical NMT II	4

[1] MA-150 is not acceptable. Higher level math courses that require Calculus as a prerequisite are acceptable. MA-150 must be completed for the Biology Major.

Upon completion, the NMT program courses, *in toto*, will satisfy the requirements for three upper level elective courses.

Minor in Biology

Requirements for a Minor in Biology

BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
Select four additional 200-level or higher Biology or Biotechnology laboratory courses.		12-16
Total Credits		20-24

Psychobiology Minor

Psychobiology, the study of human and animal biology and behavior, is an interdisciplinary minor consisting of a total of 6-7 classes (18-24 credits), with significant course contributions from both the Biology and Psychology Departments. Students are required to take courses in Biology and Psychology, which will allow them to explore the link between mind, body, and behavior. Introductory courses include both Biology and Psychology, introducing students to the basics of both disciplines. Advanced courses in both disciplines provide an in-depth understanding of the nervous system, evolutionary biology, cellular physiology, and sensation and perception. Students will have the opportunity for hands-on learning to facilitate their understanding of the concepts presented in lecture.

All students are eligible to participate in the Psychobiology minor by following either the General Track or one of two specialized tracks: Biology Major Track or Psychology Major Track. These specialized tracks assure that students who major in Biology and Psychology receive an appropriate breadth of experiences within the field of Psychobiology to complement their chosen major.

Requirements for a Psychobiology Minor

General Track

(Available to all majors except Biology and Psychology)

Code	Title	Credits
Core		(11 credits)
PS-101	General Psychology	3
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4
Electives		(10-11 credits)
Students must select ONE course from Group A, ONE course from Group B, and ONE course from Group C:		10-11
Group A (200-level)		

PS-280	Sensation and Perception	
BI-200	Human Biology	
Group B (300-level Psychology)		
PS-325	Psychology of Learning	
PS-380	Physiological Psychology	
Group C (300-level Biology w/lab)		
BI-315	Comparative Neurobiology	
BI-360	Animal Behavior	
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		23-24

Biology Major Track (Only available to Biology majors)

Code	Title	Credits
Core/Foundation		(16 credits)
PS-101	General Psychology	3
PB-200	Introduction to Psychobiology	4
PS-280	Sensation and Perception	3
PS-325	Psychology of Learning	3
PS-380	Physiological Psychology	3
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		18

Psychology Major Track (Only available to Psychology majors)

Code	Title	Credits
Core/Foundation		(20 credits)
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4
BI-200	Human Biology	4
BI-315	Comparative Neurobiology	4
BI-360	Animal Behavior	4
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		22

Note: Completing this minor also satisfies the LASC requirements of HBSP, NSP w/ Lab (2x), and the capstone requirement.

Biotechnology

Department of Biology

Worcester State University offers a program in biotechnology to meet the need for skilled laboratory associates in the experimental laboratory and in manufacturing facilities of the biotechnology industry. Biotechnology graduates are trained in tissue culture, molecular biology, protein purification, analytical chemistry, and regulatory affairs and are eligible for internships.

Graduates are qualified for careers in research and development, quality assurance, quality control, and manufacturing as well as for further (graduate) eduction.

The Biotechnology major is sponsored jointly by the departments of Biology (p. 124) and Chemistry (p. 145).

- Biotechnology (p. 138)
- Combined BS/MS Program in Biotechnology (p. 140)
- Honors Program in Biotechnology (p. 142)
- Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University (p. 142)
- Major in Biotechnology, Concentration in Bioinformatics (p. 143)
- Major in Biotechnology, Concentration in Nuclear Medicine Technology (p. 144)

Faculty

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Assistant Professor (2014), B.S. Western Kentucky University; Ph.D. University of Wisconsin-Madison

Susan Mitroka, Co-Coordinator of the Biotechnology Program, Assistant Professor (2013), B.A. Rutgers University; Ph.D. Virginia Polytechnic Institute and State University

Jeffry C. Nichols, Department Chair, Associate Professor (2006), B.A. Texas Tech University; Ph.D. Rice University

Maura Pavao, Professor (2001), B.S. Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

BT-101 Introduction to Forensic Sciences
LASC Categories: NSP, HBS
Survey of forensic case studies and the laboratory techniques used to solve crimes including microscopy, chromatography, ballistics and DNA analysis.
Every year. 4 Credits

BT-240 Advanced Research Experience for Undergraduates
Lab and/or field based research on a specific research topic under the supervision of a faculty member.
1-6 Credits

BT-375 Tissue Culture
LASC Categories: NLL
Prerequisites: CH-120 and CH-121.
A review of the methods of animal and plant tissue culture. Media preparation, aseptic techniques and cell culture technology. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

BT-376 Biotechnology
LASC Categories: NLL
Prerequisites: CH-120, CH-121, and BI-141.
Principles, applications of recombinant DNA (molecular/microbial aspects). The Biotechnology industry including bioreactor manufacturing standards and government rules. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

BT-377 Fermentation Technology
LASC Categories: NLL
Prerequisites: BI-141 and BI-204.
Explores the application of biological and engineering principles involved in manufacturing pharmaceutical products.
Every 2-3 years. 4 Credits

BT-378 Bioinformatics
LASC Categories: NLL
Prerequisites: BI-141 and BI-203.
Provides an overview of Bioinformatics including database structure, genomics, computational biology and proteomics. Three lecture hours and three laboratory hours per week.
4 Credits

BT-408 Directed Study: Biotechnology
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

BT-410 Biotechnology Seminar
LASC Categories: CAP
Up-to-date developments in Biotechnology; reparation and presentation of technical literature. Students will study new techniques and procedures used by the industry.
1-4 Credits

BT-450 Internship in Biotechnology
Qualified upper-level biotechnology majors can learn experimental techniques by working in a company laboratory or a professional manufacturing environment.
Fall and Spring and every year. 3-6 Credits

Biotechnology

Requirements for a Major in Biotechnology

BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-410	Biochemistry I	4

Major Electives		(8 credits)
Select 8 credits from the following electives:		8
BI-313	Histology	
BI-399	Biochemical Regulatory Mechanisms	
BI-398	Cancer Biology	
BI-372	Immunology	
BI-371	Molecular Biology	
BI-375	Virology	
CH-350	Medicinal Chemistry	
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II (5)	
PY-310	Modern Physics	
CH-411	Biochemistry II	
BT-377	Fermentation Technology	
BT-378	Bioinformatics	
BT-450	Internship in Biotechnology	
CH-335	Green Chemistry	
CH-450	Computational Chemistry	
CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)	
And certain other BI-300, CH-300 and PY-300 level courses with Biotech coordinator approval.		
Ancillary courses		(23 credits)
MA-190	Pre-calculus (may be waived)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
or BI-203	Genetics	
Select one of the following:		3
EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	
Select one of the following:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
Total Credits		70

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I [1]	3
CH-120	General Chemistry I	4
MA-180 or MA-190	Introduction to Functions (LASC QR)[2] or Pre-calculus	3-4
LASC	LASC Elective (HBS) (p. 56)	3
LASC	First-Year Seminar (p. 53)	3
	Credits	16-17
Semester Two		
EN-102	English Composition II [1]	3
CH-121	General Chemistry II	4
MA-190 or MA-200	Pre-calculus (LASC QR) or Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
	Credits	15
Year Two		
Semester Three		
BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
Select One of the Following		**3-4**
LASC [3]	LASC Elective (p. 47)	
MA-200	Calculus I	
Select One of the Following		**3**
EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	
	Credits	15-16
Semester Four		
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (p. 47)	3
MA-150	Statistics I [4]	3
Select One of the Following		**4**
BI-203	Genetics	
MA-201	Calculus II	
Select One of the Following		**3-5**
LASC	LASC Elective (p. 47)	

CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	4
	Credits	16-18
Year Three		
Semester Five		
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
PY-221	General Physics I (NSP)	4
LASC [3]	LASC Elective (p. 47)	3
LASC [3]	LASC Elective (p. 47)	3
	Credits	15
Semester Six		
CH-410	Biochemistry I	4
PY-222	General Physics II (NSP)	4
LASC [3]	LASC Elective (p. 47)	3
LASC [3]	LASC Elective (p. 47)	3
	Credits	14
Year Four		
Semester Seven		
BT-376	Biotechnology	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BI/BT-3XX +	BI or BT Upper Level Elective	4
LASC [3]	LASC Elective (p. 47)	3
LASC [3]	LASC Elective (p. 47)	3
	Credits	15-20
Semester Eight		
BT-375	Tissue Culture	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BT-410	Biotechnology Seminar	1-4
LASC [3]	LASC Elective (p. 47)	3
SELECT	LASC or Major Elective	3
	Credits	12-20
	Total Credits	118-135

[1] EN-101 and EN-102 satisfies LASC writing.

[2] MA-180 requires Accuplacer score of 5 or higher.

[3] The sequence of LASC courses marked with [3] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

[4] MA-150 requires an Accuplacer score of 4 or higher.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Combined BS/MS Program in Biotechnology

The Five Year Combined 4+1 BS/MS Program in Biotechnology is open to eligible students and includes three courses (10 credits) that count toward both the undergraduate and graduate degrees. Students should apply in the fall semester of the junior year. The first three years are the same as the Biotechnology B.S. Program. Students begin a research project in the Spring semester of the fourth (senior) year. Students should apply for the 4+1 Program in the third (junior) year. Application requirements include a minimum of 3.0 GPA, two letters of recommendation and the GRE.

Recommended Timeline for Completion of BS/MS Program

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I	3
CH-120	General Chemistry I	4
MA-180 or MA-190	Introduction to Functions (LASC QR) or Pre-calculus	3-4
LASC	LASC Elective (CON) (p. 49)	3
LASC	First-Year Seminar (p. 53)	3
	Credits	16-17
Semester Two		
EN-102	English Composition II	3
CH-121	General Chemistry II	4

MA-190 or MA-200	Pre-calculus or Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
	Credits	15

Year Two

Semester Three

CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
BI-204	Microbiology	4
MA-200	Calculus I(or LASC Elective)	4
EN-252 or EN-253 or CS-120	Technical Writing or Business Communications or Microcomputer Applications	3
	Credits	16

Semester Four

MA-150	Statistics I	3
MA-201	Calculus II	4
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (p. 47)	3
Select one of the following:		3-5
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	
LASC	LASC Elective (p. 47)	
	Credits	16-18

Year Three

Semester Five

CH-210	Chemical Analysis: an Introduction to Modern Methods	5
PY-221	General Physics I	4
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (p. 47)	3
	Credits	15

Semester Six

CH-410	Biochemistry I	4
PY-222	General Physics II	4
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (p. 47)	3
	Credits	14

Year Four

Semester Seven

BI-521	Biotechnology and DNA	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BI-3XX	Major Upper Level Elective	4
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (p. 47)	3
	Credits	15-20

Semester Eight

BI-527	Tissue Culture	3-4
BI-440	Advanced Research Experience for Undergraduates	3
BT-410	Biotechnology Seminar	1
BT-5XX	Major Upper Level Elective	
SELECT	Major or LASC Elective	3
	Credits	10-11

Summer I

BT-9XX	Graduate Level Elective	3
	Credits	3

Summer II

Select One of the Following

BT-9XX	Graduate Level Elective	
BI-995	Research in Biology/ Biotechnology	1-6
	Credits	1-6

Year Five

Semester One

BI-995	Research in Biology/ Biotechnology	3
BI-9XX	Graduate Level Elective	3
BI-9XX	Graduate Level Elective	3
	Credits	9

Semester Two

BI-995	Research in Biology/ Biotechnology	3
BI-9XX	Graduate Level Elective	3
BI-9XX	Graduate Level Elective	3
	Credits	9
	Total Credits	139-153

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Honors Program in Biotechnology

The Honors Program in Biotechnology is designated as a distinction bestowed on those outstanding undergraduate Biotechnology majors who have demonstrated distinct competence in overall biotechnology course work and who have completed an independent research project of substantial merit. This program offers motivated students the opportunity to develop research and communication skills in preparation for a graduate or professional career.

Requirements for the Honors Program in Biotechnology

- A written thesis describing the student's original research
- Grade point average in major and ancillary courses of at least 3.5
- Successful completion of BI-205
- Enrollment in a minimum of one semester of independent study credit (BI-440) totaling at least 4 credits

Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University

Requirements for a Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University (MCPHSU)

Requirements for a Major in Biotechnology		(39 credits)
BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-410	Biochemistry I	4
Major Electives		(8 credits)
Select two of the following electives:		8
BI-313	Histology	
BI-399	Biochemical Regulatory Mechanisms	
BI-398	Cancer Biology	
BI-372	Immunology	
BI-371	Molecular Biology	
BI-375	Virology	
CH-350	Medicinal Chemistry	
CH-202	Organic Chemistry II (lecture)	
CH-204	Organic Chemistry Laboratory II	
PY-310	Modern Physics	
CH-411	Biochemistry II	
BT-377	Fermentation Technology	
BT-378	Bioinformatics	
BT-450	Internship in Biotechnology	
CH-335	Green Chemistry	
CH-450	Computational Chemistry	

CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)	
And certain other BI 300, CH 300 and PY 300 level courses with Biotech coordinator approval.		
Ancillary courses		(29 credits)
MA-190	Pre-calculus (may be waived)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
or BI-203	Genetics	
MA-150	Statistics I	3
Select one of the following sequences:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
CS-120	Microcomputer Applications	3
EN-252	Technical Writing	3
or EN-253	Business Communications	
Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University		(9 credits)
BI-140	Introduction to Organismal Biology	4
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
Total Credits		85

Major in Biotechnology, Concentration in Bioinformatics

The purpose of this interdisciplinary concentration is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling including genomics and proteomics. With the ever increasing number of fully sequenced genomes, including the human genome, databases such as GenBank and EMBL have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. Questions of gene expression have led to computational biology, the process of analyzing genomic sequences and to the field of proteomics, the understanding of protein structure and function. The information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases.

Requirements for the Major in Biotechnology, Concentration in Bioinformatics

BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-410	Biochemistry I	4
Major Electives		(8 credits)
Select two of the following electives:		8
BI-313	Histology	
BI-399	Biochemical Regulatory Mechanisms	
BI-398	Cancer Biology	
BI-372	Immunology	
BI-371	Molecular Biology	
BI-375	Virology	
CH-350	Medicinal Chemistry	
CH-202	Organic Chemistry II (lecture)	
CH-204	Organic Chemistry Laboratory II	
PY-310	Modern Physics	
CH-411	Biochemistry II	
BT-377	Fermentation Technology	
BT-378	Bioinformatics	
BT-450	Internship in Biotechnology	
CH-335	Green Chemistry	
CH-450	Computational Chemistry	
CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)	
And certain other BI-300, CH-300 and PY-300 level courses with Biotech coordinator approval.		

Ancillary courses		(26 credits)
MA-190	Pre-calculus (may be waived)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
or BI-203	Genetics	
CS-120	Microcomputer Applications	3
EN-252	Technical Writing	3
or EN-253	Business Communications	
Select one of the following sequences:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
Concentration in Bioinformatics		(20 credits)
BT-378	Bioinformatics [1]	4
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-242	Data Structures	3
CS-282	Unix Systems Programming	3
CS-265	Database Applications	3
Total Credits		93

[1] The sequence of this LASC course is a suggestion, but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Major in Biotechnology, Concentration in Nuclear Medicine Technology

See program information under Biology (p. 135).

Chemistry

Department of Chemistry

The chemistry program provides education and training in chemistry to students who wish to pursue careers in chemistry, biotechnology, medicine, dentistry, allied health fields, science teaching, environmental science, materials science and engineering. Chemistry is considered the central science because it is required for full understanding of many other sciences as well as medicine. The Chemistry Department offers courses for general education as well as for majors in chemistry, biology, biotechnology, and nursing. Besides the chemistry major and minor programs, the department also offers concentrations in nuclear medicine technology, biochemistry, green chemistry and environmental chemistry, materials science and inorganic chemistry, and bioinformatics. Majors in chemistry may also be eligible for the Acceierated Pharmacy Program with the Massachusetts College of Pharmacy and Health Sciences. The department has a chapter of the Gamma Sigma Epsilon National Honor Society in chemistry. The department offers opportunities for undergraduate research in organic chemistry, bioanalytical chemistry, nanoscience and molecular modeling. The Chemistry Department promotes green chemistry in its curriculum and research.

- Chemistry (p. 148)
- Chemistry Honors Program (p. 150)
- Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program (p. 151)
- Major in Chemistry, Concentration in Biochemistry (p. 151)
- Major in Chemistry, Concentration in Bioinformatics (p. 152)
- Major in Chemistry, Concentration in Green Chemistry and Environmental Chemistry (p. 153)
- Major in Chemistry, Concentration in Materials Science and Inorganic Chemistry (p. 153)
- Major in Chemistry, Concentration in Nuclear Medicine Technology (p. 154)
- Minor in Chemistry (p. 154)

Faculty

Jeremy R. Andreatta, Assistant Professor (2012), B.S. Tarleton University; Ph.D. Texas A&M University

Meghna Dilip, Associate Professor (2008), B.Sc. University of Madras India; M.Sc. Anna University India; M.S.,Ph.D. University of Alabama

Anne M. Falke, Professor (1997), B.A. University of Rhode Island; Ph.D. University of New Hampshire

Eihab Jaber, Associate Professor (2006), B.A. Hunter College; M.S.,Ph.D. State University of New York Stony Brook

Margaret E. Kerr, Professor (2000), B.S. University of Maine; Ph.D. Wesleyan University

Susan Mitroka, Co-Coordinator of the Biotechnology Program, Assistant Professor (2013), B.A. Rutgers University; Ph.D. Virginia Polytechnic Institute and State University

Kathleen Murphy, Assistant Professor (2014), B.S. College of William and Mary; M.S.,Ph.D. University Of Massachusetts Amherst

Jeffry C. Nichols, Department Chair, Associate Professor (2006), B.A. Texas Tech University; Ph.D. Rice University

Joseph G. Quattrucci, Associate Professor (2011), B.A. University of Southern Maine; Ph.D. University of Massachusetts Amherst

Weichu Xu, Assistant Professor (2016), B.S. Suzhou University Suzhou China; M.S.,Ph.D Chinese Academy of Sciences

CH-106 Paper Or Plastics?
LASC Categories: NSP
Students will study modern issues related to chemistry. These will include sustainability, green chemistry, climate change and the ozone layer.
Every year. 3 Credits

CH-112 Survey of Chemistry
LASC Categories: LAB, NSP
Chemical and physical properties of inorganic, organic and biochemical compounds with implications for human health and environment. Ancillary course - Nursing program. Three lecture hours and three laboratory hours per week.
Fall and Spring and every year. 4 Credits

CH-120 General Chemistry I
LASC Categories: NLL, QR
Prerequisites: Accuplacer score of 5 or above required.
Corequisites: MA-180 (or higher)
Modern survey of chemistry. Topics include chemical equations, properties of gases, atomic structure, periodic table, chemical bonding, chemistry of carbon. Three lecture hours and three laboratory hours per week. CH-120 and CH-121 provide the foundation for further courses in chemistry.
Every year. 4 Credits

CH-121 General Chemistry II
LASC Categories: NLL
Prerequisites: CH-120
Continuation of CH120. Topics include elements of thermodynamics, acids and bases, reaction rates, oxidation-reduction reactions, and electrochemistry. Three hours of lecture and a three-hour laboratory per week.
Spring only and every year. 4 Credits

CH-193 Special Topics in Chemistry for First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students.
Every year. 3 Credits

CH-201 Organic Chemistry I (lecture)
Prerequisites: CH-120 and CH-121.
Structure, reactions, mechanisms, and stereochemistry of the alkanes, alkenes, alkynes, dienes, alkyl halides. Introduction to aromatic chemistry.
Every year. 3 Credits

CH-202 Organic Chemistry II (lecture)
Prerequisites: CH-201
Continuation of CH-201. Reactions and mechanisms of aromatic chemistry; structures and reactions of alcohols, ethers, carboxylic acids, aldhydes, ketones.
Every year. 3 Credits

CH-203 Organic Chemistry Laboratory I
LASC Categories: NLL
Prerequisites or Corequisite: CH-201
Techniques of preparation, purification, and identification of aliphatic compounds. One four- hour laboratory per week.
Every year. 2 Credits

CH-204 Organic Chemistry Laboratory II
LASC Categories: NLL
Prerequisites or Corequisite: CH-202
Application of basic and more advanced techniques to increasingly complicated synthetic problems. One four-hour laboratory per week.
Every year. 2 Credits

CH-210 Chemical Analysis: an Introduction to Modern Methods
LASC Categories: NLL, WAC
Prerequisites: CH-120, CH-121 (minimum grade C-), and EN-102.
Introduction to modern methods of chemical analysis including gravimetry, acid-base and redox titrations, potentiometry, UV-visible and atomic absorption spectrophotometry, and gas and HPLC chromatography. Three lecture hours and four laboratory hours per week.
Every year. 5 Credits

CH-250 Instrumental Technology for Forensic Analysis
LASC Categories: NSP, QAC
Introduction to instrumental techniques used to analyze crime scene evidence. Includes HPLC, IR spectrometry, Atomic spectroscopy, and GC-MS. Three lecture hours and three lab hours per week.
Other or on demand. 4 Credits

CH-301 Physical Chemistry I (Lecture Only)
Prerequisites: CH-120, CH-121, MA-200, MA-201, PY-241, and PY-242.
Study of quantum theory, chemical bonding, spectroscopy, molecular structure, and computational molecular modeling. Three lecture hours per week.
Every year. 3 Credits

CH-302 Physical Chemistry II (Lecture Only)
Prerequisites: CH-301 with a grade of C- or better.
Continuation of CH-301. Study of first, second, and third laws of thermodynamics, and of chemical solution, and phase equilibria. Three lecture hours per week.
Every year. 3 Credits

CH-303 Physical Chemistry Laboratory I
LASC Categories: NLL
Prerequisites or Corequisite: CH-301
Laboratory deals with methods of physical measurement of chemical systems and their application to the determination of molecular structure, spectroscopy and thermodynamic data.
One four-hour laboratory per week, lecture is CH301.
Other or on demand. 2 Credits

CH-304 Physical Chemistry Laboratory II
LASC Categories: NLL
Prerequisites or Corequisite: CH-302 with a grade of C- or better.
Continuation of CH303; project-oriented laboratory dealing with the study of reaction rates and mechanisms, electrochemistry, and molecular properties. One four-hour laboratory per week, lecture is CH302.
Other or on demand. 2 Credits

CH-320 Environmental Chemistry
Prerequisites: CH-120 and CH-121 or CH-201. CH-201 is recommended.
Chemistry of the atmosphere, soil, and natural water systems, air and water pollution water treatment, hazardous wastes and pollution control.
Other or on demand. 3 Credits

CH-330 Environmental Toxicology
Prerequisites: CH-120, CH-121, and BI-141.
Topics include the pharmacological and biochemical properties of toxins and the effects of toxins on human health, including assessment of risk(s).
Every 2-3 years. 3 Credits

CH-335 Green Chemistry
LASC Categories: NLL
Prerequisites: CH-120 and CH-121.
This course will provide an understanding of the fundamentals of green chemical design that either eliminates or reduces the use of generation of hazardous substances. Three hours of lecture/lab per week.
Every year. 3 Credits

CH-336 Environmental and Green Chemistry Lab
LASC Categories: NLL
Prerequisites: CH 120 and CH 121. CH-320 or CH-335 are recommended.
Laboratory experiments will demonstrate principles of green chemistry and include topics in environmental sampling, analysis and toxicology.
Four hour laboratory per week.
Every year. 2 Credits

CH-340 Advanced Inorganic Chemistry
Prerequisites: CH-120 CH-121 CH-201 or CH-202 CH-301 recommended.
This course is a survey of the chemistry of the inorganic elements, focusing on the relationship between electronic structure, physical properties, and reactivity across the periodic table.
Every 2-3 years. 3 Credits

CH-350 Medicinal Chemistry
Prerequisites: CH-201 and CH-202.
A study of how drugs work and the science and technology of modern drug discovery illustrated with case histories. Three lecture hours per week.
Every 2-3 years. 3 Credits

CH-355 Molecular Pharmacology
Prerequisites: CH-201 CH-202 BI-141
Prerequisites or Corequisite: CH-410
Course examines the interdisciplinary science of pharmacology from a chemical perspective. Topics include pharmacotherapeutics, pharmacokinetics, pharmacodynamics, pharmacognosy, pharmacy and toxicology. Three lecture hours per week.
Every 2-3 years. 3 Credits

CH-360 Introduction to Materials Science
Prerequisites: CH-120, CH-121 and either PY-221 and PY-222 or PY-241 and PY-242.
Physical structure of solids. Electrical, magnetics, thermal, and optical properties of solids, liquids, and soft matter. Structure-property relationships in materials.
Every year. 3 Credits

CH-370 Introduction to Nuclear Science
Prerequisites: CH-120, CH-121, MA-200, and either PY-221 and PY-222 or PY-241 and PY-242.
Fundamentals of nuclear science. Topics include nuclear structure and forces, radioactive decays, nuclear reactions, and modern applications.
Every 2-3 years. 3 Credits

CH-408 Directed Study: Chemistry
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3-4 Credits

CH-410 Biochemistry I
LASC Categories: NLL
Prerequisites: CH-201
Prerequisites or Corequisite: CH-202
The chemistry of proteins, nucleic acids, carbohydrates, and lipids; enzymes, biological oxidations; and correlations in intermediary metabolism. Three hours of lecture and a three- hour laboratory per week.
Every year. 4 Credits

CH-411 Biochemistry II
Prerequisites: CH-410 or BI-410
The generation and storage of metabolic energy; biosynthesis of macromolecular precursors, DNA, RNA, and protein; and biochemical regulation. Three hours of lecture per week.
Every 2-3 years. 3 Credits

CH-450 Computational Chemistry
Prerequisites: CH-301
Modern theoretical methods used in studying molecular structure, bonding, and reactivity. Application of these theories to various chemical systems.
Every 2-3 years. 4 Credits

CH-453 Radiopharmaceuticals
Fundamental concepts of radiopharmaceutical production and use including basic radiochemistry.
Every year. 4 Credits

CH-455 Special Topics in Chemistry
Exploration of frontier areas of chemistry, including chemical kinetics, quantum chemistry, polymers, spectroscopy, materials science, environmental bioinorganic and medicinal bioinorganic and medicinal chemistry. Prerequisites: 18 credits in Chemistry and consent of Department.
Every 2-3 years. 3-4 Credits

CH-465 Clinical Nuclear Medicine Tech I
Why a specific test is indicated; which radiopharmaceutical is preferred; and how the basic image appearance and/ or numerical data may be altered by pathological states.
Every year. 4 Credits

CH-466 Clinical Nuclear Medicine Tech II
Case presentations using formulas, charts, tables, and calculations to arrive at examination parameters such as amount of dose, number of counts, speed of instrument, etc.
Every year. 4 Credits

CH-470 Instrumental Analysis
LASC Categories: NLL
Prerequisites: CH-120, CH-121, and CH-210 or CH-301.
Advanced level survey of instrumental methods of separation and analysis including spectrophotometry, potentiometry, polarography, and chromatography. Laboratories are project-oriented. Two lecture hours and six laboratory hours per week.
Every 2-3 years. 4 Credits

CH-475 Chemistry Seminar
LASC Categories: CAP
Contemporary developments in chemistry, review of technical literature in both print and electronic format, preparation and presentation of technical paper. [Prerequisite: Successful completion of 25 Chemistry credits or special permission of instructor.]
Every year. 2 Credits

CH-480 Internship: Chemistry
Project completed at an institution other than Worcester State by a student with a non-Worcester State sponsor and Worcester State liaison.
Every year. 1-6 Credits

CH-490 Independent Study in Chemistry
Advanced independent work on a research problem in chemistry mutually agreed to by the student and the instructor.
Every year. 1-6 Credits

CH-495 Fundamentals of Chemical Research
Students will conduct research on an assigned project with individual guidance and supervision from the instructor. One lecture hour and four laboratory hours per week.
Fall and Spring and every year. 3 Credits

Chemistry

Requirements for a Major in Chemistry

Core		(45 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4

CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Total Credits		61

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
CH-120	General Chemistry I	4
MA-200	Calculus I (LASC QR or Math according to accuplacer score) [1]	4
LASC	Distribution Elective (p. 47)	3
	Credits	17
Semester Two		
EN-102	English Composition II	3
LASC	U.S. Constitution	3
CH-121	General Chemistry II	4
MA-201	Calculus II (LASC QR or Math according to accuplacer sore) [1]	4
LASC	Distribution Elective (p. 47)	3
	Credits	17
Year Two		
Semester Three		
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
PY-241	Physics I (Mechanics) (LASC NSP, QLAC) [1,2]	4
CH-210 or MA-200	Chemical Analysis: an Introduction to Modern Methods (LASC WAC)[3] or Calculus I	4-5
LASC	Distribution Elective (p. 47)	3
	Credits	16-17
Semester Four		
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
PY-241	Physics I (Mechanics) (LASC NSP) [1,2]	4
CH3XX/4XX	Chemistry Upper-level Elective or Calculus II (if not taken previously)	3-4
LASC	Distribution Elective (p. 47)	3
	Credits	15-16
Year Three		
Semester Five		
CH-301	Physical Chemistry I (Lecture Only)	3
CH-303	Physical Chemistry Laboratory I	2
LASC [4]	Distribution Elective or Chemical Analysis (if not taken previously)	5
SELECT	Free Elective	3
SELECT	Free Elective	3
	Credits	16
Semester Six		
CH-302	Physical Chemistry II (Lecture Only)	3
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective (p. 47)	3
LASC	Distribution Elective (p. 47)	3
SELECT	Free Elective	3
	Credits	15-16

Year Four		
Semester Seven		
CH-475	Chemistry Seminar [5]	2
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective (p. 47)	3
SELECT	Free Elective	3
SELECT	Free Elective	3
	Credits	14-15
Semester Eight		
CH3/4XXX	Chemistry Upper Level Elective	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective	3
	Credits	12-15
	Total Credits	122-129

1 It is recommended that students take Calculus (MA-200/MA-201) in their first-year and calculus-based physics (PY-241/PY-242) in their second year. This gives the best preparation for physical chemistry in the third year. EN-101 satisfies LASC writing and MA-200/MA-201 satisfies QR.

2 PY-241/PY-242 each satisifes NSP. CH-210 satisfies WAC.

3 If not taken previously.

4 3 + 3 Pre-Pharmacy students must take Chemistry Seminar in the Fall semester of Junior year. Others take in Senior year.

5 Students who have not taken Chemistry Seminar (a Capstone Experience) must take it in their senior year Fall semester.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Chemistry Honors Program

The Chemistry Honors Program is an upper-level program designed to challenge students majoring in chemistry to excel in their course work, to encourage them to extend their program beyond the basic requirements of the major, and to reward and recognize them for so doing. Students are required to have a 3.5 GPA in chemistry and ancillary courses and a 3.2 GPA overall.

Requirements for the Chemistry Honors Program

Students would need to complete the following courses in chemistry:

CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-475	Chemistry Seminar	2
300- and 400-level electives		
The following two courses must be taken as part of the required 12 credits of 300 and 400-level electives:		12
CH-340	Advanced Inorganic Chemistry	
CH-410	Biochemistry I	
Research		
CH-490	Independent Study in Chemistry (leading to the writing of a thesis)	6
Total Credits		51

In addition, students would be expected to complete the ancillary requirements for the chemistry major in calculus and physics.

Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program

(Please see program description (p. 76) in this catalog.)

Requirements for a Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences

Chemistry Major Core		(33 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Prerequisites for the Accelerated Pharmacy Program		(28 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
PY-241	Physics I (Mechanics)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
BI-204	Microbiology	4
PY-242	Physics II (Electricity, Magnetism and Optics)	4
Total Credits		61

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Biochemistry

Requirements for a Major in Chemistry, Concentration in Biochemistry

Core		(45 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Concentration in Biochemistry		(16-17 credits)

CH-410	Biochemistry I	4
CH-350	Medicinal Chemistry	3
Select two of the following:		6-7
CH-330	Environmental Toxicology	
CH-355	Molecular Pharmacology	
CH-411	Biochemistry II	
BI-371	Molecular Biology	
CH-495	Fundamentals of Chemical Research [1]	
Select three credits in one of the following: [2]		3
CH-480	Internship: Chemistry	
CH-490	Independent Study in Chemistry	
Total Credits		77-78

[1] In appropriate topic for concentration.

[2] In an appropriate topic for the concentration; may be substituted for one of the electives with departmental approval.

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Bioinformatics

The purpose of this interdisciplinary concentration is to prepare students to enter computer-intensive fields of bioinformatics, computational biology, computational chemistry and molecular modeling including genomics and proteomics. With the advent of the Human Genome Project, an explosion of genomics information has occurred, and databases such as GenBank and EMBL have grown at a rate that now requires storage, organizing and indexing of the information. Questions of gene expression have led to computational biology, the process of analyzing genomic sequences and to the field of proteomics, the understanding of protein structure and function. The information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases. Major drug and biotechnology companies are seeking people trained in bioinformatics.

Requirements for a Major in Chemistry, Concentration in Bioinformatics

Core		(45 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Concentration in Bioinformatics		(25 credits)
BI-203	Genetics [1]	4
BT-378	Bioinformatics	4
CS-140	Introduction to Programming	4
CS-242	Data Structures	3
CS-135	Programming for Non-CS Majors	3
CS-265	Database Applications	3
Select one of the following:		4
BI-203	Genetics [1]	
BI-204	Microbiology	
BI-306	Developmental Biology [1]	
BI-371	Molecular Biology [1]	

BI-375	Virology [1]	
BT-376	Biotechnology	
Total Credits		86

[1] Requires additional prerequisite courses beyond those required for the major and concentration.

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Green Chemistry and Environmental Chemistry

Requirements for a Major in Chemistry, Concentration in Green Chemistry and Environmental Chemistry

Core		(45 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Concentration in Green Chemistry and Environmental Chemistry		(14-17 credits)
CH-320	Environmental Chemistry	3
CH-335	Green Chemistry	3
CH-480	Internship: Chemistry [1]	3
or CH-490	Independent Study in Chemistry	
Select two of the following:		5-8
CH-330	Environmental Toxicology	
CH-336	Environmental and Green Chemistry Lab	
CH-410	Biochemistry I	
CH-470	Instrumental Analysis	
CH-495	Fundamentals of Chemical Research (in appropriate topic for concentration)	
Total Credits		75-78

[1] In an appropriate topic for the concentration; may be substituted for one of the electives with departmental approval.

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Materials Science and Inorganic Chemistry

Requirements for a Major in Chemistry, Concentration in Materials Science and Inorganic Chemistry

Core		(45 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6

CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	2
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Concentration in Materials Science and Inorganic Chemistry		(11-13 credits)
CH-340	Advanced Inorganic Chemistry	3
CH-360	Introduction to Materials Science	3
Select two of the following:		5-7
CH-304	Physical Chemistry Laboratory II	
PY-310	Modern Physics	
CH-470	Instrumental Analysis	
CH-495	Fundamentals of Chemical Research [1]	
May Substitute		(0 credits)
CH-480	Internship: Chemistry [2]	
or CH-490	Independent Study in Chemistry	
Total Credits		72-74

1 in appropriate topic for concentration

2 in an appropriate topic for the concentration may be substituted for one of the electives with departmental approval.

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Nuclear Medicine Technology

Requirements for a Major in Chemistry, Concentration in Nuclear Medicine Technology

See program description under Biology (p. 135).

Minor in Chemistry

Requirements for a Minor in Chemistry

CH-120 & CH-121	General Chemistry I and General Chemistry II	8
Ten (10) additional credits in 200- or higher level chemistry courses		10
Total Credits		18

Communication Sciences and Disorders

Department of Communication Sciences and Disorders

The goal of the undergraduate program of the Department of the Communication Sciences and Disorders is to facilitate an understanding of normal human communication processes and communication disorders. These disorders can develop in children or occur later in life.

Communication is defined as the sharing of needs, experiences, ideas, thoughts, and feelings with other people through modalities such as talking, listening, writing, reading, and nonverbal means. Undergraduate students in Communication Sciences and Disorders begin by learning the scientific foundations of the normal processes of communication. This scientific basis is followed by an introduction to the disorders that can occur in speech, language, and hearing in children and adults.

- Communication Sciences and Disorders (p. 157)
- Communication Sciences and Disorders (CSD) Honors Program (p. 159)
- Communication Sciences and Disorders Minor (p. 160)

Faculty

Joan E. Butterworth, Clinical Instructor (2008), B.S. Northeastern University; M.S. Purdue University

Suzanne Crawford-Stacy, Clinical Instructor (2013), B.S. Worcester State University; M.S. University of Vermont

Kristina A. Curro, Assistant Professor (2015), B.A. University of Rochester MA; Ph.D. University of Massachusetts Amherst

Keith N. Darrow, Professor (2010), B.S. University of Massachusetts; M.S. Brooklyn College; Ph.D. Massachusetts Institute of Technology and Harvard Medical School

Colleen Karow, Associate Professor (2017), B.A., M.A. Western Illinois University; Ph.D. University of Texas at Austin

Kara F. Medeiros, Assistant Professor (2013), B.S. Elmhurst College; M.S. Texas A&M Kingsville; Ph.D. University of Nebraska Lincoln

Kenneth S. Melnick, Associate Professor (2004), B.A. University of Michigan; M.A. University of Cincinnati; Ph.D. Vanderbilt University

Susanna E. Meyer, Department Chair, Professor (1997), B.A, M.A.,Ph.D. University of Pretoria South Africa

Roger L. Towne, Associate Professor (2004), B.A.,M.A. University of Montana; Ph.D. Southern Illinois University Carbondale

Anne T. Veneziano-Korzec, WSU Speech-Language-Hearing Center Director (1988), B.S. Boston College; M.S. Syracuse University

CD-100 Introduction to Human Communication and its Disorders
LASC Categories: HBS, ICW
Nature and causes of organic and functional speech/language and hearing problems, general awareness of diagnostic and therapeutic techniques.
Fall and Spring and every year. 3 Credits

CD-103 Language Science
LASC Categories: TLC
Introduction to basic linguistic knowledge including theoretical areas of pragmatics, semantics, syntax, morphology and phonology in a multicultural perspective.
Fall and Spring and every year. 3 Credits

CD-110 Anatomy and Physiology of Speech And Hearing
LASC Categories: NSP, TLC
Normal anatomy and physiology of the speech and hearing mechanisms with emphasis on respiration, phonation, resonance, articulation, and audition.
Fall and Spring and every year. 3 Credits

CD-115 Normal Development of Speech and Language
An in-depth coverage of the normal acquisition and development of speech and language, including phonology, morphology, syntax, and semantics.
Fall and Spring and every year. 3 Credits

CD-120 Introduction to Sign Language
Sign language systems and fingerspelling with emphasis on American Sign Language vocabulary and word order.
Fall and Spring and every year. 3 Credits

CD-193 Special Topics in Communication Sciences And Disorders for First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. offered only as a First-Year Seminar.
Every year. 3 Credits

CD-201 Hearing Science
LASC Categories: QAC
Prerequisites: CD-110. Accuplacer code of 3 needed.
Basic information to understand concepts in audiology: physical concepts, acoustics, psychoacoustics, measurement of sound and speech perception theories.
Fall and Spring and every year. 3 Credits

CD-202 Speech Science
Prerequisites: CD-110 and CD-205 with C or above and Accuplacer score of 3 or above.
Basic information to understand concepts in speech; physical and psychophysical bases, linguistic and psycholinguistic aspects and clinical instruments.
Fall and Spring and every year. 3 Credits

CD-205 Phonetics
The study of English speech sounds, their articulation and acoustic characteristics, and speech transcription using the International Phonetic Alphabet.
Fall and Spring and every year. 3 Credits

CD-230 Neuroscience for Communication Sciences and Disorders
LASC Categories: NSP
Structure and function of the nervous system and its relation to normal and disordered speech. language, and hearing.
Fall and Spring and every year. 3 Credits

CD-301 Directed Observations
LASC Categories: WAC
Prerequisites: EN-102
Prerequisites or Corequisite: CD-305 CD-310 CD-320
Beginning aspects of clinical issues including objectives, rapport and timing. Therapy/diagnostic sessions will be viewed and highlighted by the instructor.
Spring only and every year. 2 Credits

CD-305 Introduction to Audiology
Prerequisites: CD-201 with a minimum grade of C.
Introduction to audiometric testing techniques and interpretation as related to ear pathologies.
Spring only and every year. 3 Credits

CD-307 Intermediate Sign Language
Prerequisites: CD-120 with a minimum grade of C.
Students gain more facility in sign usage. Receptive and expressive vocabularies are expanded and fluency increased.
Other or on demand and every year. 3 Credits

CD-310 Language Disorders
Prerequisites: CD-100 CD-103 CD-110 CD-115 CD-205 CD-202
Examiniation of the processes interfering with normal language acquisition and the disorders which disturb established language skills in children and adults.
Spring only and every year. 3 Credits

CD-320 Speech Disorders
Prerequisites: CD-100 CD-110 CD-115 CD-201 CD-202 CD-205 with a minimum of C.
Study of the theoretical bases of articulation, voice and fluency disorders. Etiology, characteristics, evaluation and rehabilitation of these disorders.
Spring only and every year. 3 Credits

CD-400 Introduction to Aural Rehabilitation
LASC Categories: DAC
Prerequisites: CD-201 CD-202 CD-305 CD-310 CD-320 with a minimum grade of C. Take CD-201 CD-202 CD-305 CD-310 and CD-320 with a minimum grade of C-.
Study of the theoretical bases of articulation, voice and fluency disorders. Etiology, characteristics, evaluation and rehabilitation of these disorders.
Fall only and every year. 3 Credits

CD-401 Advanced Directed Observations
LASC Categories: WAC
Prerequisites: CD-301 with a minimum grade of C and EN-102/EN-250
Advanced aspects of clinical issues including procedures and material selection. Therapy/diagnostic sessions will be viewed and highlighted by the instructor.
Fall only and every year. 2 Credits

CD-408 Directed Study: Communication Sciences and Disorders
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

CD-410 Professional Guidelines and Skills
LASC Categories: CAP
Prerequisites: CD-305 CD-310 CD-320 with a minimum grade of C.
Presentation of professional issues; observation and practice in evaluation and treatment of speech-language and hearing disorders.
Fall only and every year. 3 Credits

CD-475 Selected Topics in Communication Sciences and Disorders
Prerequisites: CD-310 CD-320 with a minimum grade of C.
Selection of topics of mutual interest to the student and faculty. Timely topics and issues will be covered.
Spring only and every year. 3 Credits

CD-490 Independent Study in Communication Sciences and Disorders
The student will pursue an area of special interest in speech pathology or audiology through research or field experience, under faculty supervision. Junior and senior majors only.
Fall and Spring and every year. 1-6 Credits

Communication Sciences and Disorders

The undergraduate program immerses students in an academically rigorous and challenging course of study. In addition to the courses offered within the Department of Communication Sciences and Disorders, students are required to take courses in biological sciences, physical sciences, behavioral sciences, and mathematics. A Communication Sciences and Disorders baccalaureate degree provides students with a solid foundation for graduate study in several fields including Speech-Language Pathology and Audiology.

The undergraduate curriculum allows the opportunity for students who may be interested to study abroad or be part of the National Student Exchange. The second semester of year one or the first semester of year two are good choices for these pursuits. Students must plan their semester away with their department advisor at least one year in advance to assure that they complete their major requirements in a timely manner.

Overall, the Communication Sciences and Disorders major provides students with knowledge and skills that enable them to do well in either graduate school or in the work place. Students will have an excellent liberal arts education with a strong basis of normal and disordered communication. Students will acquire interpersonal, critical thinking, and problem-solving skills, as well as scientific reasoning, and strong writing, and presentation abilities.

Requirements for a Major in Communication Sciences and Disorders

CD-100	Introduction to Human Communication and its Disorders	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-201	Hearing Science	3
CD-202	Speech Science	3
CD-205	Phonetics	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
CD-301	Directed Observations	2
CD-305	Introduction to Audiology	3
CD-310	Language Disorders	3
CD-320	Speech Disorders	3
CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations	2
CD-410	Professional Guidelines and Skills	3
CD-475	Selected Topics in Communication Sciences and Disorders	3
Total Credits		46

Students must obtain a minimum grade of a C in any prerequisite major course. In addition, a major course may be repeated only once to obtain a passing grade.

Out of department requirements include the following courses: one biological science (human or animal based), one physical science (physics, natural science or chemistry based), one math (MA-180 requires a placement test score of 5), one statistics, and two behavioral sciences of which one must be in developmental psychology. These requirements cannot be taken pass/fail. Advisors in the Department of Communication Sciences and Disorders will help students choose appropriate courses in these areas.

Department of Communication Sciences and Disorders Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (LASC FYS)	3
EN-101	English Composition I (LASC WRI)	3
CD-100	Introduction to Human Communication and its Disorders	3
MA-180	Introduction to Functions (LASC QR) [1]	3
BIO SCI		
Select one of the following		
BI-103 & BI-104 or BI-101	The Human Animal or Concepts of Biology	4
	Credits	16
Semester Two		
EN-102	English Composition II (LASC WRII)	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
LASC [2]	LASC Elective (USW) (p. 61)	3
Statistics		
MA-150 or PS-275	Statistics I (LASC QR) [1] or Psychological Statistics	3
	Credits	15
Year Two		
Semester Three		
CD-201	Hearing Science (LASC QLAC) [4]	3
CD-205	Phonetics	3
LASC [2]	LASC Elective (GP) (p. 54)	3
PS-101	General Psychology	3
LASC [2]	LASC Elective (CA) (p. 50)	3
	Credits	15
Semester Four		
CD-115	Normal Development of Speech and Language	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
PS-210	Developmental Psychology	3
Physical Science		
Select one of the following: (LASC NSP) [3]		4
PY-105	Concepts in Physics I	
PY-114	Physics of Waves	
CH-112	Survey of Chemistry	
LASC [2]	LASC Elective (TLC) (p. 63)	3
	Credits	16
Year Three		
Semester Five		
CD-202	Speech Science [5]	3
LASC [2]	LASC Elective (NSP) (p. 59)	3
LASC [2]	LASC Elective (ICW) (p. 58)	3
LASC [2]	LASC Elective (CON) (p. 49)	3
SELECT	General Elective	3
	Credits	15
Semester Six		
CD-301	Directed Observations [6,7]	2
CD-310	Language Disorders [6]	3
CD-320	Speech Disorders [6]	3
CD-305	Introduction to Audiology [6]	3
LASC	Distribution Elective (p. 47)	3
SELECT	General Elective	3
	Credits	17

Year Four		
Semester Seven		
CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations [7]	2
CD-410	Professional Guidelines and Skills	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	14
Semester Eight		
CD-475	Selected Topics in Communication Sciences and Disorders	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	123

[1] MA-180 requires an Accuplacer score of 5 or higher. MA-150 requires and an Accuplacer score of 4 or higher.

[2] LASC courses indicated with [2] are suggestions and serve as a reminder that LASC Distribution Electives must be taken to satisfy the LASC requirements.

[3] See advisor for a full list of approved courses.

[4] CD-201 requires an Accuplacer score of 3 or higher.

[5] CD-202 requires an Accuplacer score of 3 or higher.

[6] CD-301, CD-305, CD-310 and CD-320 are corequisite courses.

[7] Completion of CD-301 and CD-401 satisfy LASC WAC.

Note:

1. Most major courses have prerequisites that must be completed before enrolling into the subsequent course.
2. Once major and LASC requirements are satisfied, students may elect any courses of interest to fulfill a minimum of 120 credits for graduation.
3. Students are required to meet with their department advisor to review the upcoming semester's academic course choices.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Sciences and Disorders (CSD) Honors Program

The CSD Honors Program is intended for outstanding students within the CSD major. Students completing the requirements will graduate with departmental honors. Applicants must submit a letter of application to the CSD Undergraduate Committee, a research proposal, and a letter of support from a faculty sponsor. Applications are due November 1st for Spring semester and April 1st for Fall semester.

Requirements for the Communication Sciences and Disorders Honors Program

To be part of the program, CSD students must have:

- A minimum GPA of 3.5
- No grade less that a B in all CSD courses and non-CSD required courses
- Completed a total of 60 credits
- Completed the following:

CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-201	Hearing Science	3
CD-202	Speech Science	3
CD-205	Phonetics	3
CD-230	Neuroscience for Communication Sciences and Disorders	3

Once accepted into the CSD Honors Program, students will:

- Complete a research project in collaboration with a CSD faculty mentor
- Present the project in at least one venue

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Sciences and Disorders Minor

Requirements for a Communication Sciences and Disorders Minor

18 credits within the department; 15 credits must include:

Required Courses		(15 credits)
CD-100	Introduction to Human Communication and its Disorders	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-205	Phonetics	3
Elective		(3 credits)
CD-XXX		3
In addition to the above, students taking prerequisites for the Speech-Language Pathology graduate program must take:		
CD-201	Hearing Science	
CD-202	Speech Science	
CD-230	Neuroscience for Communication Sciences and Disorders	
Total Credits		18

The minimum grade requirement for a course to count toward the minor is a "C".

Computer Science

Department of Computer Science

The Computer Science program offers an undergraduate education that promotes lifelong intellectual growth and prepares students for professional careers and advanced study. The program is grounded in the principles, theories, and application of the science of computing with a special emphasis in the areas of Big Data Analytics and Software Development.

Students will develop the ability to effectively apply discipline knowledge to solve real-world problems, adapt as the field changes, and make ethical decisions. The curriculum provides the foundations of team skills, and allows students to improve their interpersonal skills and professional attitudes. Students will have an opportunity to participate in an internship and in undergraduate research.

- Computer Science Major, Concentration in Big Data Analytics (p. 164)
- Computer Science Major, Concentration in Software Development (p. 166)
- Major in Computer Science (p. 168)
- Major in Computer Science, Concentration in Bioinformatics (p. 169)
- Minor in Computer Science (p. 170)

Faculty

Sarmad A. Al Aloussi, Assistant Professor (2017), B.Sc., M.Sc., Baghdad University; Ph.D., University of Banking and Financial Services, Computer Information Systems, Amman Jordan

Elena Braynova, Department Chair, Professor (2003), M.S. State University of New York Buffalo; M.S.,Ph.D. Moscow State University Russia

Aparna Mahadev, Professor (1999), B.Sc.,M.Sc. University of Madras India; M.S. Indian Institute of Technology India; Ph.D. University of Waterloo Canada

Hemant Pendharkar, Professor (2001), B.S.,M.S. University of Bombay India; M.S.,Ph.D. University of New Hampshire

Karl R. Wurst, Professor (1999), B.S. Central Connecticut State University; M.S.,Ph.D. University of Connecticut

CS-101 Basics of Computer Science
LASC Categories: QR
Prerequisites: Familiarity with basic computer operations. Math placement code of 3 or above
A survey course that provides a foundation in computer science by presenting a practical and realistic understanding of the field.
Fall and Spring. 3 Credits

CS-120 Microcomputer Applications
LASC Categories: QR
Prerequisites: Familiarity with basic computer operations. Math placement code of 3 or above
Learning state-of-the-art application packages including but not limited to word processing, file and database management systems and spreadsheets.
Fall and Spring. 3 Credits

CS-124 Health Informatics
LASC Categories: QR
Prerequisites: Familiarity with basic computer operations. Math placement code of 3 or above.
Use of computers and information systems in health care. Databases and spreadsheets. electronic health records. [Credit will not be awarded for both CS-120 and CS-124.]
Every year. 3 Credits

CS-135 Programming for Non-CS Majors
LASC Categories: QR
Prerequisites: Familiarity with basic computer operations. Math placement code of 3 or above.
Introfuction to programming. Emphasis on practial skills, working with data sets, doing analysis and visualization. No prior programming experience required.
Every year. 3 Credits

CS-140 Introduction to Programming
Corequisites: CS-101
Introduction to fundamental structures and concepts of Computer Science including object-oriented programming; three lecture hours and one two-hour laboratory.
Every year. 4 Credits

CS-155 Computer Networking, Security and Databases
LASC Categories: QR
This course covers network protocols and the Internet; computer security fundamentals; basics of relational databases and SQL queries.
Every year. 3 Credits

CS-161 Web Design Using HTML
Introduces concepts needed for creation, design and implementation of effective web pages. Latest versions of mark-up language(s) will be used.
Every year. 3 Credits

CS-165 Digital Forensics
Prerequisites: CS-155
Digital forensics investigation; data acquisition; processing crime and incident scenes; multiple operating systems and file fomats; digital forensics tools, analysis and validation.
Every year. 3 Credits

CS-193 Special Topics in Computer Science for First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
3 Credits

CS-225 Discrete Structures I
Prerequisites: MA 180 or math placement code 6 or above.
Asymptotic notation, sequences, recursions and methods to solve them, proof techniques, relations, functions, sets and their basic properties.
Every year. 3 Credits

CS-242 Data Structures
LASC Categories: QAC
Prerequisites: CS-140.
Prerequisites or Corequisite: Pre-requisite or co-requisite of CS-225.
Introduces time complexity and covers fundamental data structures: lists, stacks, ques, search trees , dictionaries, priority ques, B-trees and inverted files.
Every year. 3 Credits

CS-248 Algorithm Analysis
Prerequisites or Corequisite: CS-295 as corequisite
Different algorithm design strategies, sorting, searching graph algorithms, parallel algorithms, algorithm complexity, turing machines, NP-hard and NP-complete problems.
Every year. 3 Credits

CS-254 Computer Organization and Architecture
LASC Categories: NLL
Prerequisites: CS-140 EN-102.
Corequisites: Pre-requisite or co-requisite of CS-295.
Combinational and sequential circuits, assembly language programming, digital computer architecture, instruction sets, addressing modes, memory hierarchies, I/O, and control circuits. Three lecture hours and two laboratory hours per week.
Every year. 4 Credits

CS-265 Database Applications
LASC Categories: QR
Prerequisites: Familiarity with basic computer operations. Math placement code of 3 or above.
This course introduces basic database concepts and teaches how to create a database; use SQL; and create database applications. [Formerly CS 125 Database Software]
Spring only and every 2-3 years. 3 Credits

CS-282 Unix Systems Programming
Prerequisites: CS-242
Problem soling and software design using C; introduction to UNIX programming utilities and text manipulation; low-level system programming in UNIX and C.
Every year. 3 Credits

CS-295 Discrete Structures II
Prerequisites: CS-225
Logic, basic counting techniques, probabilities, basic graph theory.
Every year. 3 Credits

CS-297 Selected Topics in Computer Science
Topics of mutual interest to students and faculty.
1-4 Credits

CS-335 Networking and Web Security
Prerequisites: CS-282
This course covers web and security problems, solutions, and techniques. Encryption, worms, viruses, firewall, safe practices, etc. are covered.
Every 2-3 years. 3 Credits

CS-343 Software Construction, Design and Architecture
Prerequisites: CS-242 EN-252
Software construction techniques and tools, software architectures and frameworks, design patterns, object-oriented design and programming. efficiency, reliability and maintainability of software.
Every year. 3 Credits

CS-348 Software Process Management
Prerequisites: CS-343 CM-110 UR-230
Project management including planning, progress measurement, estimation, and risk assessment. Functional and non-functional requirements. Software licenses, contracts and intellectual property.
Every year. 3 Credits

CS-353 Information Organization, Management, and Retrieval
Prerequisites: CS-155 CS-242.
Prerequisites or Corequisite: Pre-requisite or co-requisite of CS-373.
The course introduces fundamental concepts, standards, technologies and methods for information organization, storage, management, retrieval and recovery.
Every year. 3 Credits

CS-365 Client Server Computing Using the Internet
Prerequisites: CS-242
This course covers what client/server is and covers various client/server models and explores the Internet from a client/server perspective.
Every 2-3 years. 3 Credits

CS-373 Operating Systems
Prerequisites: CS-254 or CS-352, and CS-282 EN-252
Hardware and Software as an integrated system; development of system software for process management, resource allocation, memory management and I/O processing. [Formerly CS 385 Operating Systems]
Every year. 3 Credits

CS-383 Cloud, Parallel an Distributed Computing
Prerequisites: CS-373
The course introduces basics of Cloud Computing and fundamental computing technologies used for Big Data platforms such as Parallel, Distributed Computing.
Every year. 3 Credits

CS-405 Data Communications and Networking
Prerequisites: CS-373, EN-252 and CM-110.
Data transmission, encoding, interfacing, synchronization, data-link control, multiplexing, networking, circuit switching, packet switching, radio and satellite, local area networks, network access protocols.
Every 2-3 years. 3 Credits

CS-408 Directed Study: Computer Science
Directed study offers students, who because of unusual circumstances may be unable to register fro a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

CS-443 Software Quality Assurance and Testing
Prerequisites: CS-242 and MA-150 or MA-302
Requirements analysis and test plan design. Testing strategies and techniques. Test coverage using statistical techniques. Code reviews and insepctions.
Every year. 3 Credits

CS-448 Software Development Capstone
LASC Categories: CAP
Prerequisites: CS-343 CS-373 CS-443
Prerequisites or Corequisite: CS-348 as prereq or coreq.
Development of a significant software system, following appropriate project and team management techniques. Requirements, design, implementation, quality assurance, professional, social and ethical issues.
Every year. 3 Credits

CS-453 Data Mining
Prerequisites: CS-242 MA-150 CM-110 UR-230
Topics include data warehousing and mediation techniques; data mining meathods: rule-based learning; decision trees, association rules and sequence mining.
Every year. 3 Credits

CS-471 Artificial Intelligence
Prerequisites: CS-371 CS-242 EN-252
Introduction to central issues of constructing intelligence systems. Examines historical and future trends of AI intelligence.
Every 2-3 years. 3 Credits

CS-472 Robotics
Prerequisites: CS-254 CS-282
Design and implementation of robotic systems, snesors and sensing, effectors, mechanics, control startegies and architectures, hardware and software issues.
Every 2-3 years. 3 Credits

CS-483 Big Data Analytics Capstone
LASC Categories: CAP
Prerequisites: CS-353 CS-453 CS-383
The course introduces methods and techniques used for Big Data analysis. The course discusses Analytics tools for a variety of data applications and includes a major team project.
Every year. 3 Credits

CS-497 Selected Topics: Computer Science
Prerequisites: CS-282
Selection of topics of mutual interest to student and faculty.
Other or on demand. 1-6 Credits

CS-498 Internship: Computer Science
Prerequisites: 21 credit hours in Computer Science courses including CS-282
Working in and for an organization where skills can be tested in real situations in order to gain experience, increase knowledge in various functional areas, and establish important contacts with an organization.
Every year. 3 Credits

CS-499 Independent Study: Computer Science
Prerequisites: 18 credit hours in Computer Science including CS-282.
An opportunity for advanced students to examine topics not normally taught in other mathematics or computer courses. Geared to the interests of both the student and the instructor.
Every year. 1-6 Credits

Computer Science Major, Concentration in Big Data Analytics

Data is being generated at high speed, in large volumes, and by a variety of systems around the world. In such a data-driven and information-centric world, the ability to analyze information and make informed decisions is crucial to every field including business, medicine, the sciences, entertainment, and government. This concentration provides students with the skills, techniques, and knowledge needed to pursue a career in this field.

Requirements for the Concentration in Big Data Analytics

Core Courses		(32 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CS-373	Operating Systems	3
Elective Courses		(6 credits)
Credits in Computer Science courses at the 300 level or above [1]		6
Ancillary Requirements [2]		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
MA-150	Statistics I [3]	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses [4]		7
Requirements for the Concentration in Big Data Analytics		(12 credits)
CS-353	Information Organization, Management, and Retrieval	3
CS-383	Cloud, Parallel an Distributed Computing	3
CS-453	Data Mining	3
CS-483	Big Data Analytics Capstone	3
Total Credits		81

[1] Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

[2] 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

[3] Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

[4] Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Department of Computer Science: Big Data Analytics Concentration Sample Timeline for Completion of Degree

This four-year plan assumes a Math Placement score of at least 6.

Course	Title	Credits
Year One		
Semester One		
CS-101	Basics of Computer Science	3
EN-101	English Composition I	3
MA-190	Pre-calculus (or Math/Science Course) [1,2]	4
LASC	First-Year Seminar (FYS) (p. 53)	3
LASC [3]	LASC Elective (CON) (p. 49)	3
	Credits	16
Semester Two		
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
EN-102	English Composition II	3
MA-200	Calculus I	4
	Credits	14
Year Two		
Semester Three		
CS-242	Data Structures	3
EN-252	Technical Writing	3
CS-225	Discrete Structures I	3
UR-230	Technology, Public Policy and Urban Society	3
LASC [3]	LASC Elective (CA) (p. 50)	3
	Credits	15
Semester Four		
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CM-110	Public Speaking	3
LASC [3]	LASC Elective (GP) (p. 54)	3
	Credits	16
Year Three		
Semester Five		
CS-248	Algorithm Analysis	3
CS-373	Operating Systems	3
CS-353	Information Organization, Management, and Retrieval	3
LASC	Lab Science (NSP) (p. 59)	4
MA-150 or MA-302	Statistics I [4] or Probability and Statistics	3
	Credits	16
Semester Six		
CS-383	Cloud, Parallel an Distributed Computing	3
CS-3XX+	CS Elective	3
LASC [2]	Math or Science course	3-4
LASC	Lab Science (NSP) (p. 59)	4
LASC [3]	LASC Elective (USW) (p. 61)	3
	Credits	16-17
Year Four		
Semester Seven		
CS-453	Data Mining	3
CS-3XX+	CS Elective	3
LASC [3]	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
CS-483	Big Data Analytics Capstone	3
LASC [3]	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12
	Total Credits	120-121

[1] If the students math placement score requires her/him to take MA-190, it should be taken this semester, so that MA-200 can be taken in the Spring semester. EN-101 & EN-102 satisfy LASC writing requirements.

[2] All Math and Science courses must be selected from a list of department approved courses.

[3] The sequence of LASC courses marked with [3] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements

[4] Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

Note:

The sequence of LASC courses marked with [3] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Once LASC requirements are satisfied, students may select general requirements. Please refer to the University Catalog for specific curriculum details regarding major and LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Computer Science Major, Concentration in Software Development

Software systems impact all aspects of life, from phones, to cars, to work lives, and beyond. Software developers analyze the software and infrastructure needs of people and organizations and then coordinate the design, implementation, and testing of the solutions. This concentration provides students with the skills, techniques, and knowledge needed to pursue a career in this field.

Requirements for the Concentration in Software Development

12 credits in addition to the Core, Elective, and Ancillary courses.

Core Courses		(32 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CS-373	Operating Systems	3
Elective Courses		(6 credits)
Credits in Computer Science courses at the 300 level or above [1]		6
Ancillary Requirements [2]		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
MA-150	Statistics I [3]	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses [4]		7
Requirements for the Concentration in Software Development		(12 credits)
CS-343	Software Construction, Design and Architecture	3
CS-348	Software Process Management	3
CS-443	Software Quality Assurance and Testing	3
CS-448	Software Development Capstone	3
Total Credits		81

1 Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

2 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

3 Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

4 Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Department of Computer Science: Software Development Concentration Sample Timeline for Completion of Degree

This four-year plan assumes a Math Placement score of at least 6.

Course	Title	Credits
Year One		
Semester One		
CS-101	Basics of Computer Science	3
EN-101	English Composition I	3
MA-190	Pre-calculus (or Math/Science Course) [1,2]	4
LASC	Freshman Seminar (FYS)	3
LASC [3]	LASC Elective (CON) (p. 49)	3
	Credits	16
Semester Two		
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
EN-102	English Composition II	3
MA-200	Calculus I (QR)	4
	Credits	14
Year Two		
Semester Three		
CS-242	Data Structures	3
EN-252	Technical Writing	3
CS-225	Discrete Structures I	3
UR-230	Technology, Public Policy and Urban Society (HBS)	3
LASC [3]	LASC Elective (CA) (p. 50)	3
	Credits	15
Semester Four		
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CM-110	Public Speaking (TLC)	3
LASC [3]	LASC Elective (GP) (p. 54)	3
	Credits	16
Year Three		
Semester Five		
CS-248	Algorithm Analysis	3
CS-373	Operating Systems	3
CS-343	Software Construction, Design and Architecture	3
LASC	Lab Science (NSP) (p. 59)	4
MA-150 or MA-302	Statistics I [4] or Probability and Statistics	3
	Credits	16
Semester Six		
CS-348	Software Process Management	3
CS	300+ Level Elective in Major	3
LASC [2]	Math or Science course	3-4
LASC	Lab Science (NSP) (p. 59)	4
LASC [3]	LASC Elective (USW) (p. 61)	3
	Credits	16-17
Year Four		
Semester Seven		
CS-443	Software Quality Assurance and Testing	3
CS	300+ Level Elective in Major	3
LASC [3]	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
CS-448	Software Development Capstone	3
LASC [3]	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3

SELECT	General Elective	3
	Credits	12
	Total Credits	120-121

1 If the students math placement score requires her/him to take MA-190, it should be taken this semester, so that MA-200 can be taken in the Spring semester. EN-101 & EN-102 satisfy LASC writing requirements.

2 All Math and Science courses must be selected from a list of department approved courses.

3 The sequence of LASC courses marked with [3] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements

4 Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

Note:

The sequence of LASC courses marked with [3] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Once LASC requirements are satisfied, students may select general requirements. Please refer to the University Catalog for specific curriculum details regarding major and LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Major in Computer Science

Program Outcomes for the Major in Computer Science

Upon completion of the Computer Science Major students will be able to:

- Analyze a problem, develop/design multiple solutions, and evaluate and document the solutions based on the requirements.
- Communicate effectively both in written and oral form.
- Identify professional and ethical considerations, and apply ethical reasoning to technological solutions to problems.
- Demonstrate an understanding of and appreciation for the importance of negotiation, effective work habits, leadership, and good communication with teammates and stakeholders.
- Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

It is highly recommended that entering students have four years of high school mathematics including the equivalent of pre-calculus.

Students wishing to apply courses transferred from other institutions to the Computer Science major should meet with the department chair to determine the applicability of the courses before registering for any Computer Science courses at Worcester State University.

Non-traditional students with more than 5 years of Computer Science work experience may be eligible to participate in the Next Step Program. The program offers an opportunity to gain credit in the major for writing a prior learning portfolio. The department chair can assist in determining if the program will serve each student's educational goals.

Requirements for a Major in Computer Science

Students must complete a core of ten Computer Science courses, one of the two Computer Science concentrations, two Computer Science Elective courses, and 31 credits of Ancillary courses.

If a CS student completed both CS concentrations (all courses from both the BIG Data Analytics and the Software Development concentration) he/she will be able to declare a second concentration and two of the courses in that second concentration can be used to fulfill the 6 credits of required CS electives.

Core Courses		(32 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3

CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CS-373	Operating Systems	3
Elective Courses		(6 credits)
Credits in Computer Science courses at the 300 level or above [1]		6
Required CS Concentration		(12 credits)
One of the CS Concentrations (Big Data Analytics or Software Development)		12
Ancillary Requirements [2]		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
MA-150	Statistics I [3]	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses [4]		7
Total Credits		81

1. Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.
2. 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis
3. Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.
4. Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Major in Computer Science, Concentration in Bioinformatics

The purpose of this interdisciplinary concentration is to prepare Computer Science students to enter science-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling including genomics and proteomics. With the advent of the Human Genome Project, an explosion of genomics information has occurred and databases such as GenBank and EMBL have grown at a rate that now requires storage, organizing, and indexing of the information.

Questions of gene expression have led to computational biology, the process of analyzing genomic sequences and to the field of proteomics, the understanding of protein structure and function. The information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases. Major drug and biotechnology companies are seeking people trained in bioinformatics.

Requirements for the Major in Computer Science, Concentration in Bioinformatics

In addition to the requirements for the Major in Computer Science:

Core Courses		(32 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CS-373	Operating Systems	3
Elective Courses		(6 credits)
Credits in Computer Science courses at the 300 level or above [1]		6
Required CS Concentration		(12 credits)
One of the CS Concerntration (Big Data Analytics or Sofware Development)		12
Ancillary Requirements [2]		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3

UR-230	Technology, Public Policy and Urban Society	3
MA-150	Statistics I [3]	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses [4]		7
Concentration in Bioinformatics		(30 credits)
BI-141	Intro to Cellular and Molecular Biology	4
BT-378	Bioinformatics	4
CH-120	General Chemistry I [5]	4
CH-121	General Chemistry II [5]	4
CS-353	Information Organization, Management, and Retrieval [6]	3
MA-201	Calculus II [7]	4
MA-303	Mathematical Modeling	3
Select one of the following:		4
BI-203	Genetics	
BI-204	Microbiology	
BI-306	Developmental Biology [8]	
BI-371	Molecular Biology [8]	
BI-375	Virology [8]	
BI/CH-410	Biochemistry I [8]	
BT-376	Biotechnology	
Total Credits		*Up to 111*

1 Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

2 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

3 Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

4 Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

5 Count as the two Lab Science courses required in the CS major Ancillary requirements, but are not NSP.

6 Counts to Big Data Analytics concentration OR to a CS elective.

7 Counts as the additional Math/Science course from a department-approved list of courses. Required in the CS major Ancillary requirements.

8 Requires additional prerequisite courses beyond those required for the major and concentration.

Minor in Computer Science

Requirements for a Minor in Computer Science

(Minimum of 20 credits)

CS-101	Basics of Computer Science	3
CS-135	Programming for Non-CS Majors	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking, Security and Databases	3
Two more Computer Science course at the 200 level or above.		6
Total Credits		19

Education

DISCLAIMER: REGULATIONS FOR TEACHER LICENSURE ARE CURRENTLY UNDER REVIEW BY THE MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION. AS A RESULT, THE PROGRAMS DESCRIBED BELOW MAY BE SUBJECT TO CHANGE AT ANY TIME.

Department of Education

The Education Department offers a wide range of undergraduate and graduate programs in professional education. Students can become licensed to teach in early childhood (PK-2) with and without disabilities,.elementary (1-6), middle (5-8), or secondary (8-12) schools or credentialed to teach in preschool and day care programs. The department programs offer a blending of classroom and fieldwork approaches. Kappa Delta Pi, the International Honor Society in Education, is available to outstanding upper-division students. Graduate programs provide opportunities for students to prepare for careers in Reading, Educational Administration, Moderate Disabilities, and School Psychology, as well as in Early Childhood, Elementary, Middle, or Secondary Education.

To teach in the Commonwealth of Massachusetts a teaching license is required. The Worcester State University Teacher Education program is recognized by the Massachusetts Department of Elementary and Secondary Education as having an approved program in the fields of Early Childhood Education, Elementary Education, Middle School Education, and Secondary School Education. Students in the Elementary and Early Childhood Education programs have two complete majors, one in a liberal arts and science area and one in education. The Middle and Secondary school programs have a major in content and a minor in education. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed to obtain the initial license.

The Initial Licensure Teacher Education Program at Worcester State University is nationally accredited under TEAC; now known as the Council for the Accreditation of Educator Preparation (CAEP) for a period of seven years, from May 2014 - May 2021. The accreditation does not include individual education courses that the Education Preparation Program offers to P-12 educators for professional development, re-licensure, or other purposes.

- Early Childhood Education Major (p. 176)
- Early Education and Care Program (p. 180)
- Elementary Education Major (p. 182)
- Middle School Education (p. 185)
- Secondary School Education (p. 187)

Associate Dean of Education

Raynold M. Lewis, Professor (1998), Associate Dean for Education
BTh., West Indies College; M.Ed., Worcester State College; Ph.D., Illinois State University

Faculty

Caroline M. Chiccarelli, Associate Professor (2001), A.B. Newton College of the Sacred Heart; M.A. Fairleigh Dickinson University; Ph.D. University of Connecticut

Diane Cooke, Professor (2002), B.S. Louisiana State University; M.A.,Ph.D. University of Colorado Boulder

Douglas R. Dawson, Associate Professor (2009), B.A. Princeton University; Ph.D. University of California Irvine

Carol B. Donnelly, Professor (1997), A.B. Wellesley College; M.A. University of Miami; M.Ed. Harvard University; Ed.D. Boston University

Denise Foley, Associate Professor (2010), B.A. College of the Holy Cross; M.Ed. Bridgewater State College; C.A.G.S. Fitchburg State College; Ed.D. Indiana University of Pennysylvania

Sue F. Foo, Department Chair, Professor (2004), M.Ed.,Ed.D. University of Cincinnati

Pamela Hollander, Assistant Professor (2012), B.A. State University of New York Binghamton; M.Ed. Rutgers University; Ed.D University of Massachusetts Amherst

Christina L. Kaniu, Associate Professor (2010), B.A. Stonehill College; M.Ed. Worcester State College; Ed.D. Northeastern University

Raynold M. Lewis, Associate Dean of Education, Professor (1998), BTh. West Indies College; M.Ed. Worcester State College; Ph.D. Illinois State University

Susan R. Monaghan, Assistant Professor (2016), B.S. University of Massachusetts Amherst; A.M. Stanford University; Ph.D. Marquette University

Margarita Perez, Professor (1999), B.A. Mount Holyoke College; M.A.,Ed.D. Teachers College Columbia University

Kelly C. Reinhart, Assistant Professor (2017), B.S., Pennsylvania State University; Ed.M., Ed.D., Boston University

Kirby L. Wycoff, Assistant Professor (2013), B.A. Lehigh University; M.Ed. Teachers College Columbia University; Ph.D. Rutgers University

Sara L. Young, Associate Professor (2010), B.A. School for International Training; M.S.T. New School for Social Research; Ed.D. University of Massachusetts Amherst

ED-101 MTEL Preparation for the Communication And Literacy Skills Subtest
Credits do not count towards graduation. MTEL preparation for the Communication and Literacy Skills Subtest.
Fall only and every year. 1 Credit

ED-102 MTEL Preparation for the General Curriculum Multi-Subject Or Early Childhood Subtests
Credits do not count towards graduation. MTEL preparation for the General Curriculum Multi-subject or Early Childhood Subtests.
1 Credit

ED-103 Mtel Preparation for the Foundations Of Reading Sub-Test
Credits do not count towards graduation.MTEL Preparation for the Foundations of Reading Sub-test.
1 Credit

ED-104 MTEL Preparation for the Mathematics Portion of the General Curriculum Subtest
Credits do not count towards graduation. MTEL Preparation for the Mathematics Portion of the General Curriculum Subtest.
1 Credit

ED-149 Introduction to the Teaching Profession Middle/Secondary School
LASC Categories: HBS
This course will provide a basic understanding to the teaching aspects in middle and secondary classrooms. It will explore the Massachusetts Department of Educational Professional Standards for Teachers and give students a general orientation to the profession. Principles of the teaching/learning process and related skills will be addressed, in addition to observable behaviors in the classroom setting(s). Students will be required to do 5 fieldwork observation hours in an accredited middle/secondary school.
Fall and Spring and every year. 3 Credits

ED-155 Teaching and Learning in Elementary School
LASC Categories: ICW
Overview of the teaching profession, examination of a variety of learning environments, organizing and managing schools, integrating curricula, observational techniques.
Fall and Spring and every year. 3 Credits

ED-160 Early Childhood Education Today
LASC Categories: HBS
Exploration of early childhood education emphasizing developmentally appropriate creativities, motor skills. Discussion: families, community resources, play, integration of special needs. 6 hours of fieldwork.
Fall and Spring and every year. 3 Credits

ED-191 Explorations in Education
An introductory education course on a current or specialized topic.
Every 2-3 years. 3 Credits

ED-193 First Year Seminar Education
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

ED-206 Young Children, Lerning and Special Needs
LASC Categories: DAC, ICW
Prerequisites: ED-160
Analysis of children's learning, focusing on special education, typical and atypical conditions for learning- birth through age eight.
Fall and Spring and every year. 3 Credits

ED-207 The Adolescent in Schools & Society
LASC Categories: ICW
This course will investigate the educational, psychological, social and environmental factors related to adolescents in school settings.
Fall and Spring and every year. 3 Credits

ED-211 Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum
Prerequisites: ED-160, ED-206 and PS-210
Designing and evaluating multi-disciplinary curricula for all children; materials, organizing environments, regulations, learning theories, evaluation of children's learning and development.
Fall and Spring and every year. 3 Credits

ED-214 Emergent Literacy
LASC Categories: WAC
Prerequisites: EN-102 and ED-160 and ED-206 and ED-211
Early literacy skills, content and approaches include construction of meaning with written and spoken language, written language forms and functions, letter-sound relationship, phonemic awareness, vocabulary development and assessment. Methods of teaching second language are included.
Every year. 3 Credits

ED-250 Educational Psychology
Prerequisites: PS-210.
Learning and developmental processes of typical and atypical learners. Motivation, relationships of intelligence, affect, and achievement. Application to teaching and learning. Prerequisite Elementary: PS 210, ED 155 Prerequisite Middle School: PS 215
Every year. 3 Credits

ED-251 Principles of Curriculum, Instruction And Assessment in Middle and High School
LASC Categories: WAC
Introduces lesson planning, literacy demands, curriculum development and assessment strategies at the middle and high school level. Includes fieldwork.
Every year. 3 Credits

ED-255 Lrng Skills for Adolescents
Teaching reading, study, and communication skills appropriate to developmental stages, special needs, social, racial and linguistic background of students. Includes field experience.
Every year. 3 Credits

ED-257 Tchg Exceptional Adolescents
Teaching and curriculum modifications for learning disabled, handicapped, unmotivated, undisciplined, and gifted high school students from diverse backgrounds.
Spring only and every year. 3 Credits

ED-261 Introduction to the Foundations of Reading
This course provides an opportunity for prospective elementary and early childhood level teachers to acquire a strong foundation in current knowledge, perpective and procedures for teaching literacy in grades PK through 6.
Every year. 3 Credits

ED-266 Foundations of Curr and Instr
Investigation of curriculum materials which meet the special needs and interests of secondary school students. Includes field experience.
Every year. 3 Credits

ED-270 Diversity & Multicultural Ed
LASC Categories: DAC
Prerequisites: PS-210 or ED-207 and ED-251.
Analyzes goals, values, and practices in educating culturally diverse populations. Includes bilingual, special needs and gifted students.
Every year. 3 Credits

ED-271 International and Comparative Education
LASC Categories: ICW, GP
This course compares the educational policies, practices and coutcomes in two or more countries.
3 Credits

ED-275 Curr/Instr in Elementary Ed
LASC Categories: WAC
Prerequisites: PS-210, ED-155 and ED-250.
Analysis of interactions in effective elementary schools through participation in and exploration of curriculum, teaching and learning roles. Field experience.
Every year. 3 Credits

ED-285 Intro Children Special Needs
Special needs (learning disabilities); designed to orient prospective teachers with the problems of children with special needs.
Other or on demand. 3 Credits

ED-304 Best Practices for English Language Learners
LASC Categories: TLC, DAC
Prerequisites: ED-270 and either ED-275 or ED-214
Research-based grade level subject matter, instructional strategies, and perfrormance assessments of English Language Learners are the focus of discussions and class projects.
Every year. 3 Credits

ED-306 Elementary Reading, Language Arts and Literature
Stresses innterrelationships of oral/written communication; investigates concepts, skills and procedures for teaching literacy and using children's literature in grades 1-6.
Every year. 6 Credits

ED-307 Ece - Science
Thematically taught developmentally-appropriate activities linked to State Science Frameworks (Life, Physical, Earth/Space). Emphasizing hands-on inquiry and relevance to learners' experiences, and addressing diversity, authentic assessment, and use of technology. Pre-requisite: Admitted to Stage 2
Fall and Spring and every year. 3 Credits

ED-308 ECE - Mathematics
LASC Categories: QAC
Application of Piaget's ideas to early mathematical education. Other well-known psychologists' views concerning early mathematics instruction, with application. Field experience. Prerequisite: Admitted into Stage 2.
Fall and Spring and every year. 3 Credits

ED-313 Practicum in Early Childhood Education: Preschool/Kindergarten
Corequisites: ED-400
Prerequisites or Corequisite: ED-300, ED-301 and ED-317
150 hour practicum in an NAEYC accredited preschool/kindergarten/licensed day care center. Students apply content, methods, and materials from college courses.
Fall and Spring and every year. 3 Credits

ED-319 Advanced Field Experience in Early Childhood Education
LASC Categories: CAP
Prerequisites: ED-313 and ED 400.
Students who have already completed a preschool practicum complete an additional 100-150 hour field experience in Early Childhood Education. Portfolio required.
Fall and Spring and every year. 3 Credits

ED-320 Elementary Science
Thematically taught grade-appropriate activities linked to State Science Frameworks (Life, Physical, Earth/Space). Emphasizing hands-on inquiry and relevance to learners' experiences, and addressing diversity, authentic assessment, and use of technology. Prerequisite: Admitted into Stage 2
Fall and Spring and every year. 3 Credits

ED-325 Elementary Math
LASC Categories: QAC
Prerequisites: MA-130 MA-132
Mathematics in elementary school. Emphasizes curriculum theory, material development, and evaluation of materials/techniques. Prerequisite: Admitted into Stage 2
Fall and Spring and every year. 3 Credits

ED-330 Elementary Social Studies and Mulriculturalism
Goals, curriculum, skills, issues, teaching strategies in educating diverse populations in a global context. Prerequiste: Admitted into Stage 2
Fall and Spring and every year. 3 Credits

ED-339 Children's Literature: Multicultural Literature for PK-9
LASC Categories: HBS, TLC, DAC
Facets of literature for children and criteria for the selection of each, techniques and preparation and use.
Fall and Spring and every year. 3 Credits

ED-340 Language Arts & Literacy for the Primary Grades
Early literacy/language arts content, curriculum materials, and approaches including phonological awareness, phonics, vocabulary, fluency, comprehension, writing and assessment. Admitted into Stage 2.
Fall and Spring and every year. 3 Credits

ED-351 Exceptionalities and Accommodating Diverse Learners in Secondary Schools
Exploration of learning disabilities and other exceptionalities. Addresses strategies to differentiate secondary school curriculum to meet student needs. 10 hours fieldwork.
Fall and Spring and every year. 3 Credits

ED-352 Exceptionalities and Accommodating Diverse Learners in Middle Schools
Exploration of learning disabilities and other exceptionalities. Addresses strategies to differentiate secondary school curriculum to meet student needs. 10 hours fieldwork.
Fall and Spring and every year. 3 Credits

ED-353 Assessment, Adjustment to Practice, and Classroom Management in the Secondary School
LASC Categories: WAC
Explores classroom management and development and analysis of assessment strategies and data to inform secondary school teaching. 15 hours fieldwork.
Fall and Spring and every year. 3 Credits

ED-354 Assessment, Adjustment to Practice, and Classroom Management in the Middle School
LASC Categories: WAC
Explores classroom management and development and analysis of assessment strategies and data to inform secondary school teaching. 15 hours of fieldwork.
Fall and Spring and every year. 3 Credits

ED-370 Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level
Corequisites: ED-382 or ED-383
Teaching methods and advanced curriculum course for STEM fields including math, health, and the sciences. Taken concurrently with pre-practicum.
Fall and Spring and every year. 3 Credits

ED-371 Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.
Corequisites: ED-382 or ED-383
Teaching methods and advanced curriculum course for humanities fields, including English, World Language, and History/Political Science. Taken concurrently with prepracticum.
Fall and Spring and every year. 3 Credits

ED-375 Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School
Prepracticum experience in the elementary classroom, addressing accomodations of ELL's and children with disabilities, classroom management, and family/community engagement.
Every year. 3 Credits

ED-382 Prepracticum Experience in Middle School
Prepracticum experience in the subject areas and at the level of the license which the candidate is pursuing. Taken concurrently with ED-370 or ED-371. 25 hours fieldwork.
1 Credit

ED-383 Prepracticum Experience in Secondary School
Prepracticum experience in the subject areas and at the level of the license which the candidate is pursuing. Taken concurrently with ED-370 or ED-371. 25 hours fieldwork.
1 Credit

ED-386 Assessment and Adjustment in Practice In Early Childhood Education
Development of skills to assess young children and identify special needs. Analyzing assessment data and adjusting practice to improve learning. Pre-requiste: Admitted to Stage 2.
Fall and Spring and every year. 3 Credits

ED-400 Inclusive Early Childhood Education: Preschool Through Grade 2
Special education law and procedures, modification of programs for English language learners, working with parents, and developing and implementingan anti-bias curriculum. Pre-requisite: Admitted to Stage II.
Fall and Spring and every year. 3 Credits

ED-405 Classroom Management and Child Guidance Techniques
LASC Categories: CAP
Prerequisites or Corequisite: ED-430
Guided analysis/application of principles for students completing a practicum in primary classrooms. Classroom management and guidance techniques.
Fall and Spring and every year. 3 Credits

ED-408 Directed Study: Education
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

ED-410 Spec Topics: Education
Prerequisites: ED-155
A seminar courseon current issues or topics in education.
Fall and Spring and every year. 3 Credits

ED-424 Sem: Teaching Practicum
LASC Categories: CAP
Prerequisites or Corequisite: ED-480 or ED-485
Implications of the attempts to juxtapose theory and practice are analyzed from the viewpoint of becoming professional teachers. Taken concurrently with ED-480 and ED-485. Prerequisite: Admitted into Stage 3
Fall and Spring and every year. 3 Credits

ED-425 Sem: Applying Ed Principles
LASC Categories: CAP
Prerequisites or Corequisite: ED-435
Guided analyses and application of principles and procedures for students completing their practicum. Prerequisite: Admitted into Stage 3.
Fall and Spring and every year. 3 Credits

ED-430 Practicum in Early Childhood Education: Grade 1 or Grade 2
Prerequisites or Corequisite: ED-405.
Semester-long 200-hour practicum in first or second grade. Planning, implementing, evaluating learning. Setting includes children with sepcial needs.
Fall and Spring and every year. 9 Credits

ED-435 Practicum in Teaching: Elementary School
Prerequisites or Corequisite: ED-425
Principles, techniques, and responsibility of planning, executing, and evaluating teaching and learning for a full semester.
Fall and Spring and every year. 9 Credits

ED-450 Independent Study in Education
For the student who wishes to pursue independent study in education; faculty members from other disciplines may be called upon to counsel the student.
Fall and Spring and other or on demand. 1-9 Credits

ED-475 Practicum in Teaching
For the secondary education student; practice in teaching in the secondary school. Prerequisite: Completion of required education courses including the appropriate course in methods and media
Fall and Spring and every year. 6-12 Credits

ED-480 Practicum Tchg Secondary Sch
Prerequisites or Corequisite: ED-424
planning, teaching, and evaluating learning experiences. Prerequisite: Admitted into Stage 3
Fall and Spring and every year. 9 Credits

ED-485 Practicum in Teaching Middle School
Prerequisites or Corequisite: ED-424
Full semester teaching experience in a middle school. Includes planning, teaching, and evaluating learning experiences. Prerequisite: Admitted into Stage 3
Fall and Spring and every year. 9 Credits

Early Childhood Education Major

The Early Childhood Education major prepares candidates for the Massachusetts Department of Elementary and Secondary Education Initial License as a teacher of children in public school classrooms, PK through grade 2. The program of studies is based upon a broad liberal arts foundation and an integrated professional teacher preparation program. A course waiver process is available for transfer students where appropriate. Fieldwork accompanies most education courses and is a necessary component of the program. Student prepracticum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to ensure a well rounded experience.

Preparation for the Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed to obtain the initial license.

Early Childhood Education Major Teacher Licensure Program (Massachusetts Public Schools, PK-2)

Requirements for a Major in Early Childhood Education leading to MA Department of Elementary and Secondary Education Initial Licensure (PK-2):

45 credits

Prerequisite Courses

MA-130	Number and Operations for Teachers	3
PS-210	Developmental Psychology	3
Total Credits		6

Required Courses

ED-160	Early Childhood Education Today	3
ED-206	Young Children, Lerning and Special Needs	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
ED-214	Emergent Literacy	3
ED-304	Best Practices for English Language Learners	3
ED-307	Ece - Science	3
ED-308	ECE - Mathematics	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
ED-340	Language Arts & Literacy for the Primary Grades	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
ED-405	Classroom Management and Child Guidance Techniques	3
ED-430	Practicum in Early Childhood Education: Grade 1 or Grade 2	9
Total Credits		45

Recommended Courses

EN-102	English Composition II (or equivalent)	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
HE-100	Personal Health	3
HE-120	Health and Nutrition	3

Students are required to take specific liberal arts and science courses to satisfy foundation and distribution requirements.

Early Childhood Education Teacher Licensure majors must also complete an academic major in one of the following: Biology, Chemistry, English, Geography, History, Mathematics, Liberal Studies, Natural Science, Psychology, Sociology, Spanish, or Visual and Performing Arts.

Admission to the Early Childhood Education Major

Early Childhood Education majors seeking the MA Department of Elementary and Secondary Education Initial License will progress through a three-stage process. Each stage must be satisfactorily completed before passage to the next stage.

Stage I: Early Childhood Major

1. Students demonstrate competence in communication skills by completing the following course with a grade of C or higher.

EN-102	English Composition II (or equivalent)	3

2. Students demonstrate competence in math with a grade of C or higher in the following course:

MA-130	Number and Operations for Teachers	3

3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning classroom observations in the Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-160, students must be fingerprinted through the Massachusetts designated agency (MorphoTrust USA IdentoGO). Additional information regarding fingerprinting is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher and earning a cumulative GPA of 2.5.

PS-210	Developmental Psychology	3
ED-160	Early Childhood Education Today (5 hours fieldwork)	3
ED-206	Young Children, Lerning and Special Needs (10 hours)	3

ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum (10 hours fieldwork)	3
ED-214	Emergent Literacy (10 hours fieldwork)	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education (5 hours fieldwork)	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3

5. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test. MTEL preparation courses are available in the fall and spring semesters.
6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into the Early Childhood Licensure Program

1. Upon satisfactory completion of Stage I requirements, students are eligible to apply for formal admission to the Early Childhood Education Licensure Program. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following methods courses.

ED-304	Best Practices for English Language Learners	3
ED-307	Ece - Science (10 hours fieldwork)	3
ED-308	ECE - Mathematics (10 hours fieldwork)	3
ED-313	Practicum in Early Childhood Education: Preschool/Kindergarten	3
ED-340	Language Arts & Literacy for the Primary Grades (10 hours fieldwork)	3

2. After completing 90 credits of academic work, students may apply for formal admission into ED-313 (corerequisite ED-400). This application will be reviewed and acted upon by the Licensure Officer. Additional information regarding formal application for Practicum in ECE is available from the Education Department.

Stage III: Early Childhood Education Major – Practicum

1. Upon satisfactory completion of Stage II requirements, students are eligible to apply for formal admission into ED-430 (corequisite ED-405).
2. Students must have received a passing score on all portions of the Massachusetts Test for Educator Licensure (Communication and Literacy, Early Childhood, and Foundations of Reading).
3. Students must have attained senior standing (90 credits of course work) to complete the Primary Practicum.
4. This application will be reviewed and acted upon by the Licensure Officer.
5. Students convicted of a felony may be denied admission to student teaching.
6. Any departure from the prescribed program of study must be approved by the Department Chair and/or Associate Dean

Additional information regarding formal application for the Primary Practicum is available from the Education Department.

Department of Education: Early Childhood Education & Second Major Sample Timeline For Completion of Degree

Course	Title	Credits
Year One		
Semester One		
ED-160	Early Childhood Education Today	3
EN-101	English Composition I [1]	3
LASC	First-Year Seminar (p. 53)	3
MA-130	Number and Operations for Teachers (LASC QR)	3
PS-101	General Psychology (LASC HBS)	3
	Credits	15
Semester Two		
EN-102	English Composition II [1]	3
HI-111	US History I (LASC Const)	3
ED-206	Young Children, Lerning and Special Needs (LASC DAC)	3
PS-210	Developmental Psychology	3
GS-101	Physical Geography (LASC NSP)	3
Second Major Requirement		
	Credits	15
Year Two		
Semester Three		
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
HI-112	US History II (LASC USW)	3
HE-100	Personal Health (LASC ICW)	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers (LASC QR)	3
LASC QLAC or Second Major Requirement		
	Credits	12
Semester Four		
ED-214	Emergent Literacy (LASC WAC)	3
EV-120	Integrated Environmental Science for Educators	4
ED-339	Children's Literature: Multicultural Literature for PK-9 (or other LASC Elective TLC)	3
Second Major Requirement		
Second Major Requirement		
	Credits	10
Year Three		
Semester Five		
ED-307 or ED-308	Ece - Science or ECE - Mathematics	3
ED-340	Language Arts & Literacy for the Primary Grades	3
MU-237	Music in the Elementary School (LASC CA)	3
HI-103	World Civilization I (LASC GP)	3
Second Major Requirement		
Second Major Requirement		
	Credits	12
Semester Six		
ED-308 or ED-307	ECE - Mathematics (LASC QLAC) or Ece - Science	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3
Second Major Requirement		
Second Major Requirement		
Second Major Requirement		
	Credits	6
Year Four		
Semester Seven		
ED-304	Best Practices for English Language Learners (LASC DAC)	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
Second Major Requirement		
Second Major Requirement		
	Credits	9
Semester Eight		
ED-405	Classroom Management and Child Guidance Techniques	3

ED-430	Practicum in Early Childhood Education: Grade 1 or Grade 2	9
	Credits	12
	Total Credits	91

[1] EN-101 & EN-102 satisfies LASC writing.

MTEL Timeline:

- After completing EN-102, students should take the Communication and Literacy Skills MTEL.
- By the beginning of their Junior Year, students should take the Foundations of Reading MTEL.
- By the end of their Junior Year, students should take the Early Childhood MTEL.
- In order to enroll in ED-405 and ED-430, students must successfully complete all MTEL requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Early Education and Care Program

(Early Intervention, Head Start, Private Preschool, and Group Day Care)

The Early Childhood Education major prepares students to enter the field of Early Education and Care and work in areas such as Early Intervention, Head Start, private preschoo,l and group day care. The program integrates studies in liberal arts and sciences with the guidelines and standards presented by the MA Department of Early Education and Care. Fieldwork accompanies most education courses and is a necessary component of the program. A course waiver process is available for transfer students and articulation agreements are in place with regional community colleges.

Admission into the Early Education and Care Major

Early Education and Care students will progress through a three-stage process. Each stage within this track must be satisfactorily completed before passage to the next stage.

Stage I: Early Education and Care

1. Students demonstrate competence in communication skills by completing the following course with a grade of C or higher.

EN-102	English Composition II (or equivalent)	3

2. Students must submit a CORI application and be approved prior to beginning classroom observations in the Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state.

3. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5 or higher.

ED-160	Early Childhood Education Today	3
ED-206	Young Children, Lerning and Special Needs	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
ED-214	Emergent Literacy	3

4. Any departure from the prescribed program of study must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Early Education and Care

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission to the Early Education and Care Program. The application must include transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

   During Stage II, students must complete all of the following courses with a grade of C+ or higher. Fieldwork accompanies the following methods courses.

ED-307	Ece - Science	3
ED-308	ECE - Mathematics	3
ED-340	Language Arts & Literacy for the Primary Grades	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3

Stage III: Early Education and Care Practicum

1.	ED-313	Practicum in Early Childhood Education: Preschool/Kindergarten	3
	ED-319	Advanced Field Experience in Early Childhood Education [1]	3
	ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2 [1]	3

[1] 90 credits must be completed prior to taking ED-319. ED-400 should be taken as a corequisite with ED-313.

2. Students must apply for formal admission to ED-313 and ED-319. This application will be reviewed and acted upon by the Licensure Officer. Additional information regarding formal application for the advanced practicum is available from the Education Department.

This program provides preparation for certification through the Department of Early Education and Care as a Lead Teacher for Preschool.

Note: This program does not lead to Massachusetts Department of Elementary and Secondary Education public school licensure. Students who complete this program and apply to the WSU post-baccalaureate non-degree initial licensure program must provide evidence that they have worked in the field for 3 years. Any departure from the prescribed program of study must have approval from the Department Chair and/or the Associate Dean of Education.

Requirements for Early Education and Care: 33 Credits

Prerequisite Course		(0 credits)
PS-210	Developmental Psychology	
Required Courses		(33 credits)
ED-160	Early Childhood Education Today	3
ED-206	Young Children, Lerning and Special Needs	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
ED-214	Emergent Literacy	3
ED-307	Ece - Science	3
ED-308	ECE - Mathematics	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
ED-319	Advanced Field Experience in Early Childhood Education	3
ED-340	Language Arts & Literacy for the Primary Grades	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
Recommended Courses		(0 credits)
ED-304	Best Practices for English Language Learners	
HE-120	Health and Nutrition	
or HE-140	Creative Arts and Health	
MA-130	Number and Operations for Teachers	
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	
Total Credits		33

Students are required to take specific liberal arts and science courses to satisfy foundation and distribution requirements. Students can meet with their advisors and/or consult their degree audit through WebAdvisor.

Early Education and Care majors must either complete an academic major in the arts or sciences approved by the Education Department OR complete a cluster of 30 credits of course work which address the MA Department of Early Education and Care's Core Teacher Competencies. A list of possible courses is available in the Education Department.

Elementary Education Major

Elementary Education Major Teacher Licensure Program

The Elementary Education major prepares candidates for Initial Licensure as a teacher of children in a public school classroom, grades 1 through 6. The program of study is based upon a broad liberal arts foundation and an integrated professional teacher preparation program. A course waiver process is available for transfer students where appropriate. Fieldwork accompanies most education courses and is a necessary component of the program. Student prepracticum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to ensure a well rounded experience.

Preparation for the Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed to obtain the initial license.

Admission to the Elementary Education Major

Students planning to major in Elementary Education will progress through a three-stage process. Each stage must be satisfactorily completed before passage to the next stage.

Stage I: Elementary Education Major

1. Students must demonstrate competence in communication skills by completion of the following course with a grade of C or higher.

EN-102	English Composition II (or equivalent)	3

2. Students must demonstrate competence in Math with a grade of C or higher in the following courses:

MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3

3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to doing classroom observations in Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-155, students must be fingerprinted through the Massachusetts designated agency (MorphoTrust USA IdentoGO). Additional information regarding fingerprinting is available in the Education Department.
4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5.

PS-210	Developmental Psychology	3
ED-155	Teaching and Learning in Elementary School (5 hours fieldwork)	3
ED-250	Educational Psychology (10 hours fieldwork)	3
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed (10 hours fieldwork)	3

5. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.
6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into the Elementary Education Licensure Program

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission to the Elementary Education Licensure Program. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.
2. During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following methods courses.

ED-304	Best Practices for English Language Learners	3
ED-306	Elementary Reading, Language Arts and Literature (20 hours fieldwork)	6
ED-320	Elementary Science (10 hours fieldwork)	3
ED-325	Elementary Math (10 hours fieldwork)	3
ED-330	Elementary Social Studies and Mulriculturalism (10 hours fieldwork)	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3

Stage III: Elementary Education Major – Practicum

1. Upon satisfactory completion of Stage II requirements, the student is eligible to apply for formal admission into the Practicum, ED-435 (corequisite ED-425).
2. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) in Communication and Literacy Skills, Foundations of Reading, and the General Curriculum Test for Elementary Majors which includes a separately scored Mathematics subtest.
3. The Stage III application will be reviewed and acted upon by the Licensure Officer.
4. Students must have attained senior standing (90 credits of course work) to student teach.
5. Students convicted of a felony may be denied admission to student teaching.
6. Any departure from the prescribed program of study must be approved by the Department Chair and/or Associate Dean of Education.

Additional information regarding formal application into student teaching is available from the Education Department.

Requirements for a Major in Elementary Education

Prerequisite Courses

MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
PS-210	Developmental Psychology	3

Required Courses

ED-155	Teaching and Learning in Elementary School	3
ED-250	Educational Psychology	3.
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed	3
ED-304	Best Practices for English Language Learners	3
ED-306	Elementary Reading, Language Arts and Literature	6
ED-320	Elementary Science	3
ED-325	Elementary Math	3
ED-330	Elementary Social Studies and Mulriculturalism	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School	9
Total Credits		45

Recommended Courses

HE-100	Personal Health	3
or HE-120	Health and Nutrition	

Students will also be required to take specific liberal arts and science courses to satisfy LASC requirements.

Elementary Education majors seeking Initial Licensure must also complete an academic major in one of the following: Biology, Chemistry, English, Geography, History, Mathematics, Liberal Studies, Natural Science, Psychology, Sociology, Spanish, or Visual and Performing Arts.

Department of Education: Elementary Education & Second Major Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I [1]	3
MA-130	Number and Operations for Teachers (LASC QR) [2]	3
PS-101	General Psychology (LASC HBS)	3
ED-155	Teaching and Learning in Elementary School	3
	Credits	15
Semester Two		
EN-102	English Composition II [1]	3
HI-111	US History I (LASC USW)	3
MA-131	Patterns, Functions and Algebra for Teachers (LASC QR) [2]	3
PS-210	Developmental Psychology	3
Second Major Requirement		
	Credits	12
Year Two		
Semester Three		
ED-250	Educational Psychology	3
HI-112	US History II (LASC Constitutions)	3
EN-132	World Literature (LASC GP, DAC)	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers (LASC QR) [2]	3
Second Major Requirement		
Second Major Requirement		
	Credits	12
Semester Four		
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed	3
TH-191	Introduction to the Theatre (LASC CA)	3
EV-120	Integrated Environmental Science for Educators	4
Second Major Requirement		
Second Major Requirement		
	Credits	13
Year Three		
Semester Five		
GS-101	Physical Geography (LASC NSP)	3
ED-304	Best Practices for English Language Learners	3
ED-306	Elementary Reading, Language Arts and Literature [3]	6
Second Major Requirement		
Second Major Requirement		
	Credits	12
Semester Six		
ED-330	Elementary Social Studies and Mulriculturalism	3
ED-320 or ED-325	Elementary Science or Elementary Math	3
HE-100 or HE-120	Personal Health (LASC ICW) or Health and Nutrition	3
HI-104	World Civilization II (LASC TLC)	3
Second Major Requirement		
Second Major Requirement		
	Credits	12

Year Four		
Semester Seven		
ED-320 or ED-325	Elementary Science or Elementary Math	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
Second Major Requirement		
Second Major Requirement		
Second Major Requirement		
	Credits	6
Semester Eight		
ED-425	Sem: Applying Ed Principles (LASC CAP) [4]	3
ED-435	Practicum in Teaching: Elementary School [4]	9
	Credits	12
	Total Credits	94

1 EN-101 & EN-102 satisfies LASC writing. Students should take the Communication and Literacy Skills MTEL after completing EN-102.

2 Students should take the General Curriculum Mathematics Subtest MTEL after completing MA-130, MA-131 and MA-132.

3 Students should take the Foundations of Reading MTEL after completing ED-306.

4 Students must successfully complete all MTEL requirements before enrolling in ED-425 and ED-435.

Students are required to meet with their department advisor each semester to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Middle School Education

Middle School Education (Grades 5–8)

Initial Teacher Licensure Program

Worcester State University offers the Initial Licensure Program in Middle School Education (grades 5-8). The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student prepracticum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings.

They also vary their placements and grade levels in different school buildings within districts to insure a well rounded experience.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of Biology	(5-8)
Teacher of Chemistry	(5-8)
Teacher of English	(5-8)
Teacher of History	(5-8)
Teacher of General Science	(5-8)
Teacher of Health/Family and Consumer Sciences	(PK-12)
Teacher of Political Science	(5-8)
Teacher of Mathematics	(5-8)
Teacher of Earth Science	(5-8)
Teacher of Spanish	(5-12)

For required courses in these areas students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students planning to minor in Middle School Education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. **Students will major in the Liberal Arts and Science content area in which they intend to teach.**

Requirements for the Middle School Education Initial Teacher Licensure Program

Stage I: Middle School Education Minor

1. Students must complete EN-102 with a grade of C or higher.

2. Students must complete 15 semester hours in the subject major.

3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning classroom observations for Education courses. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-149, students must be finger printed through the Massachusetts designated agency (Morpho Trust USA Idento GO). Additional information regarding finger printing is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5.

ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
ED-207	The Adolescent in Schools & Society	3
ED-251	Principles of Curriculum, Instruction And Assessment in Middle and High School	3
ED-270	Diversity & Multicultural Ed	3

5. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.

6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Middle School Education Licensure Program

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission into the middle school education minor. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

2. During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following methods courses.

ED-304	Best Practices for English Language Learners	3
ED-352	Exceptionalities and Accommodating Diverse Learners in Middle Schools	3
ED-354	Assessment, Adjustment to Practice, and Classroom Management in the Middle School	3
ED-370	Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level	3
or ED-371	Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.	
ED-382	Prepracticum Experience in Middle School (corerequisite with ED 370/ED371)	1

3. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) in their major subject area and communication and literacy skills.

Stage III: Middle School Education Minor – Practicum

1. Upon satisfactory completion of Stage II requirements, the student is eligible to apply for formal admission into the practicum, ED-485 (9 credits), ED-424 (3 credits)
2. Students must have received a passing score on the Massachusetts Test for the Educator Licensure (MTEL) in Communication and Literacy Skills and the subject matter area.
3. The Stage III application will be reviewed and acted upon by the Licensure Officer.
4. Students must have attained senior standing (90 credits of course work) to student teach.
5. Students convicted of a felony may be denied admission to student teaching.

Additional information regarding formal application into student teaching is available from the Education Department.

Secondary School Education

Secondary School Education (Grades 8–12)

Initial Teacher Licensure Program

Worcester State University offers the Initial Licensure in Secondary School Education (grades 8-12). The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student prepracticum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to insure a well rounded experience.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with the liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of English	(8-12)
Teacher of History	(8-12)
Teacher of Political Science	(8-12)
Teacher of Mathematics	(8-12)
Teacher of Chemistry	(8-12)
Teacher of Biology	(8-12)
Teacher of Earth Science	(8-12)
Teacher of Health/Family and Consumer Sciences	(5-12)
Teacher of Spanish	(5-12)

For required courses in these areas, students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students planning to minor in Secondary Education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. **Students will major in the Liberal Arts and Science content area in which they intend to teach.**

Requirements for the Secondary School Education Initial Teacher Licensure Program

Stage I: Secondary School Education Minor

1. Students must complete EN-102 with a grade of C or higher.
2. Students must complete 15 semester hours in the subject major.
3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning observations for Education courses. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-149, students must be finger printed through the Massachusetts designated agency (Morpho

Trust USA Idento GO). Additional information regarding finger printing is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.5.

ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
ED-207	The Adolescent in Schools & Society	3
ED-251	Principles of Curriculum, Instruction And Assessment in Middle and High School	3
ED-270	Diversity & Multicultural Ed	3

5. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.

6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Secondary School Education Minor

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission into the Secondary School Education minor. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

2. During Stage II, students must complete all of the following courses with a Grade of C+ or higher AND earn cumulative GPA of 2.7. Fieldwork accompanies the following methods courses:

ED-304	Best Practices for English Language Learners	3
ED-351	Exceptionalities and Accommodating Diverse Learners in Secondary Schools	3
ED-353	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School	3
ED-370	Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level	3
or ED-371	Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.	
ED-383	Prepracticum Experience in Secondary School (corerequisite with ED 370/ED371)	1

3. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) in their major subject area and communication and literacy skills.

Stage III: Secondary School Education Minor – Practicum

1. Upon satisfactory completion of Stage II requirements, the student is eligible to apply for: ED 480 Practicum in Teaching Secondary School (9 credits), ED-424 (3 credits)

2. Students must have received a passing score on the Massachusetts Test for the Educator Licensure (MTEL) in Communication and Literacy Skills and the subject matter area.

3. The Stage III application will be acted upon by the Licensure Officer.

4. Students must have attained senior standing (90 credits of course work) to student teach.

5. Students convicted of a felony may be denied admission to student teaching.

Additional information regarding formal application into student teaching is available from the Education Department.

Environmental Science

Department of Earth, Environment, and Physics

Environmental Science is an interdisciplinary science major for students interested in scientific aspects of human interactions with the natural world. Course work includes fundamental concepts in biology, chemistry, earth science, and physics and emphasizes an interdisciplinary approach to environmental science. The major provides a broad foundation, introducing students to scientific techniques, analyses, and tools for assessing human impacts on environmental systems and for mitigating or remediating environmental harm. Hands-on field and laboratory investigations of environmental systems are emphasized in course work and through opportunities for guided research with faculty mentors.

The Environmental Science major provides a pathway into a variety of careers and graduate programs. The major is appropriate for students interested in careers in education, environmental conservation, natural resource management, environmental consulting, planning, and a wide variety of specialized scientific disciplines. Environmental science majors are well prepared for graduate studies in the earth and environmental sciences as well as diverse fields such as business, law, environmental management, or sustainability studies.

- Environmental Science (p. 191)

Faculty

Timothy L. Cook, Associate Professor (2012), B.S. Brown University; M.S. University of Delaware; Ph.D. University of Massachusetts

Meghna Dilip, Associate Professor (2008), B.Sc. University of Madras India; M.Sc. Anna University India; M.S.,Ph.D. University of Alabama

Allison Dunn, Associate Professor (2007), B.A. Oberlin College; M.A.,Ph.D. Harvard University

Nirvana Filoramo, Assistant Professor (2011), B.S. University of Massachusetts, Amherst; M.S. Iowa State University; Ph.D. University of Connecticut

William J. Hansen, Department Chair, Professor (2005), B.A. State University of New York Albany; M.A. Hunter College; Ph.D. City University of New York Graduae Center

Margaret E. Kerr, Professor (2000), B.S. University of Maine; Ph.D. Wesleyan University

Douglas E. Kowalewski, Associate Professor (2012), B.S. Virginia Polytechnic Institute; Ph.D. Boston University

Kathleen Murphy, Assistant Professor (2014), B.S. College of William and Mary; M.S.,Ph.D. University Of Massachusetts Amherst

Steven J. Oliver, Department Chair, Professor (2003), B.A. University of Montana; Ph.D. Boston University

Randall Tracy, Professor (2003), B.S.,M.S. University of Connecticut; Ph.D. Arizona State University

Sebastian Velez, Associate Professor (2012), B.S. University of Puerto Rico; M.S. University of Notre Dame; Ph.D. Harvard University

EV-120 Integrated Environmental Science for Educators
LASC Categories: NSP, LAB
Introduction to the scientific method. Physical, biological and earth sciences as applied to problems in environmental science. Three lecture hours and Two laboratory hours per week.
Every year. 4 Credits

EV-150 Environmental Science
LASC Categories: NSP
Interdisciplinary scientific study of human impacts on natural systems. Introduction to fundamental concepts and tools of environmental impact analysis.
Every year. 3 Credits

EV-199 Special Topics in Environmental Science
Lecture or laboratory course in selected areas of Environmental Science presented by departmental instructor. Topics will be announced in advance.
1-6 Credits

EV-400 Environmental Science Seminar
A capstone course. Independent projects include studying scientific literature, summarizing peer-reviewed articles, preparing science lessons with experiments, preparing resumes.
Spring only and every year. 3 Credits

EV-408 Directed Study: Environmental Science
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3-4 Credits

EV-410 Independent Study in Environmental Science
Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research.
1-6 Credits

EV-412 Special Topics in Environmental Science
Intended for the undergraduate who wishes to undertake study of selected topics in Environmental Science of mutual interest to student and faculty.
1-6 Credits

EV-420 Advanced Geoscience Research and Frieldwork
Lab and or field-based research on a specific geoscience topic under supervision of a faculty member. [Permission of instructor.]
Fall and Spring and every year. 1-6 Credits

Environmental Science

Requirements for a major in Environmental Science: 67 credits

Required Foundation Courses		(43 credits)
MA-150	Statistics I	3
or MA-302	Probability and Statistics	
MA-190	Pre-calculus	4
or MA-200	Calculus I	
CS-135	Programming for Non-CS Majors	3
GS-165	Geographic Information Systems I	4
EV-150	Environmental Science	3
Environmental Policy Course		
GE-258	Global Environmental Change	3
or GE-240	Energy Conservation	
GS-101	Physical Geography	3
GS-140	Physical Geology	4
BI-140	Introduction to Organismal Biology	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
PY-221	General Physics I	4
or PY-241	Physics I (Mechanics)	
Intermediate Courses		(10 credits)
BI-202	Principles of Ecology	4
Select two of the following:		6
GS-225	Oceanography	
GS-250	Hydrology	
GS-260	Introduction to Soil Science	
Advanced Courses		(11 credits)
Four environmental science electives approved by the student's advisor. [1]		11
Capstone		(3 credits)
EV-400	Environmental Science Seminar	3
Total Credits		67

[1] Must include at least two 300- or 400-level courses and at least one lab course. (A list of appropriate BI, CH and GS courses at the 200 level or higher will be published each semester for advising purposes.)

Students in the Environmental Science major are not required to take LASC NSP or QR courses outside of the major. Students are required to meet with their department advisor to review their upcoming semester academic choices.

Department of Earth, Environment and Physics - Environmental Science Major

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA-150 or MA-302	Statistics I or Probability and Statistics	3
EV-150	Environmental Science	3

GS-140	Physical Geology	4
	Credits	16
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
BI-140	Introduction to Organismal Biology	4
MA-190 or MA-200	Pre-calculus [2] or Calculus I	4
GS-101	Physical Geography	3
	Credits	17
Year Two		
Semester Three		
PY-221 or PY-241	General Physics I or Physics I (Mechanics)	4
GS-165	Geographic Information Systems I	4
CS-135	Programming for Non-CS Majors	3
LASC [1]	LASC Elective (TLC) (p. 63)	3
LASC [1]	LASC Elective (USW) (p. 61)	3
	Credits	17
Semester Four		
GS-225	Oceanography	3
GE-258 or GE-240	Global Environmental Change or Energy Conservation	3
BI-202	Principles of Ecology	4
LASC [1]	LASC Elective (CA) (p. 50)	3
LASC [1]	LASC Elective (GP) (p. 54)	3
	Credits	16
Year Three		
Semester Five		
CH-120	General Chemistry I	4
GS-250	Hydrology	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	16
Semester Six		
CH-121	General Chemistry II	4
GS-260	Introduction to Soil Science	3
SELECT	GS-2XX, BI-2XX or CH-2XX Major Elective	3-4
LASC	LASC Elective (HBS) (p. 56)	3
SELECT	General Elective	3
	Credits	16-17
Year Four		
Semester Seven		
SELECT	BI-2XX, GS-2XX or CH-2XX Major Elective	3-4
SELECT	BI-3XX, GS-3XX or CH-3XX Major Elective	3-4
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12-14
Semester Eight		
EV-400	Environmental Science Seminar (CAP)	3
SELECT	BI-3XX, GS-3XX or CH-3XX Major Elective	3-4
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12-13
	Total Credits	122-126

1 The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements. Across the curriculum LASC requirements may be met by major courses.

2 May also be any MA course above 200.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography and Earth Sciences

Department of Earth, Environment, and Physics

Geography is a science that examines physical and social processes and their interrelationships through the integrative concept of space. Earth systems science analyzes the systems and processes that shape the earth's surface including weather, climate, landforms, and hydrology. Human geography analyzes social processes such as globalization, demographics, urbanization, and construction of cultural identities. Environmental geography examines the interactions between social and physical systems. Geographers explore these processes using such tools as maps, geographic information systems, and remote sensing techniques.

Membership in Gamma Theta Upsilon, the international geography honor society, is available to distinguished students. Prospective members must have completed a minimum of 3 geography or earth science courses, have a GPA of at least 3.3 overall in those courses, and have completed at least 3 semesters of college course work. A prospective member is not required to be a geography major or minor.

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

- Geography Honors Program (p. 197)
- Geography Major: Earth Science Education Concentration (p. 197)
- Geography Major: Earth System Science Concentration (p. 199)
- Geography Major: Environmental Studies Concentration (p. 200)
- Geography Major: General Geography Concentration (p. 202)
- Geography Major: Geographic Information Systems Concentration (p. 203)
- Geography Minor (p. 205)

Faculty

Patricia A. Benjamin, Associate Professor (2001), B.A. University of Oregon; M.L.S. University of Maryland; Ph.D. Clark University

Timothy L. Cook, Associate Professor (2012), B.S. Brown University; M.S. University of Delaware; Ph.D. University of Massachusetts

Allison Dunn, Associate Professor (2007), B.A. Oberlin College; M.A.,Ph.D. Harvard University

William J. Hansen, Department Chair, Professor (2005), B.A. State University of New York Albany; M.A. Hunter College; Ph.D. City University of New York Graduae Center

Douglas E. Kowalewski, Associate Professor (2012), B.S. Virginia Polytechnic Institute; Ph.D. Boston University

Nabin K. Malakar, Assistant Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Alexander R. Tarr, Assistant Professor (2016), B.A. University of Southern California; Ph.D. University of California Berkley

GE-102 Human Geography
LASC Categories: GP, HBS
Introduction to human geography, emphasizing globalization, human-environment relations, and spatial patterns of population, development, economics, politics, urbanization and culture.
Fall and Spring and every year. 3 Credits

GE-110 World Regional Geography I
LASC Categories: GP, HBS
This survey examines characteristics of land and peoples of Europe and Asia.
Every year. 3 Credits

GE-111 World Regional Geography II
LASC Categories: GP, HBS
This survey examines characteristics of land and peoples of Africa, Australia, Oceania and the Americas.
Every year. 3 Credits

GE-130 Introduction to Energy Studies
Foundation concepts in energy studies. Overview of environmental and societal implications of energy systems - past, present and future.
Every year. 3 Credits

GE-193 Special Topics in Geography for First- Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

GE-195 Special Topics
Introductory course to be offered on a trial basis. Topic to be announced in advance.
Every 2-3 years. 1-6 Credits

GE-200 Geographic Literature Seminar
Prerequisites: GE-102 and GS-101 and GS-140 and GS-165
Geography majors will attend research seminars, conduct literature searches; identify relevant primary literature; read and take notes on primary literature; compile annotated bibliographies; create written syntheses.
Every year. 1 Credit

GE-210 Geography of North America
Prerequisites: one GE/GL-102, GE/GL-111, hi-111, HI-112, SO-100, UR-101.
Analysis of the physical and human geography of North America
Other or on demand. 3 Credits

GE-240 Energy Conservation
Concepts, technologies and policies for energy conservation. Inefficiencies of current systems; technical and social changes for energy efficiency.
Every year. 3 Credits

GE-250 Urban Geography
LASC Categories: HBS
Prerequisites: GE-102 or GL/GE-102 or UR-101
World urbanization, location, and central place concepts, economy of cities, land use patterns, urban, physical, and societal environmental problems.
Every 2-3 years. 3 Credits

GE-255 Geography of Africa
LASC Categories: DAC, GP
Prerequisites: GE-102 or GE-111 or GL/GE-102 or GL/GE-111 or GL-150 or SO-100 or SO-110 or UR-101
Analysis of the physical and human geography of Africa.
3 Credits

GE-258 Global Environmental Change
Prerequisites: GE-102 or GL/GE-102 or GS-101 or GL-150 or NS-150 or UR-101 or CH-106
An introduction to the science, political economy and ethics of global environmental change.
3 Credits

GE-285 Sustainable Communities
LASC Categories: HBS, USW
Prerequisites: GE-102 or GL/GE-102 or GL-150 or EC-110 or EC-120.
Exploration of changes in U.S. and global economic landscape, 1970 to present. Approaches to sustainable economic development.
Every 2-3 years. 3 Credits

GE-299 Special Topics
Intermediate level course to be offered on a trial basis. Topic to be announced in advance.
1-6 Credits

GE-307 American Public Lands:Environmental Issues
Prerequisites: GE-258 or permission of instructor.
Exploration of the environmental management issues on U.S. public lands such as national parks, national forests BLM lands.
Every year. 3 Credits

GE-308 Environment and Development
Prerequisites: GE-258
The global ecology of rich and poor environmental implications of poverty, economic development, mass consumption, globalization and demographic change.
3 Credits

GE-312 Sustainable Food Systems
Prerequisites: GE-102 or a 200 level GE, GS, SO or UR course.
Overview of the structure, evolution, costs and benefits of the global food system. Exploration of local and global alternatives.
3 Credits

GE-341 Fundamentals of Renewable Energy
Prerequisites: GE-130 or GE-240
Analysis of renewable energy concepts, policy and politics. technologies and methods for renewable energy capture, storage and distribution.
Every year. 3 Credits

GE-342 Sustainable Housing And Techniques
Prerequisites: GE-130 or GE-240
Principles of green design with an emphasis on building construction. Material and energy flows, choice of materials, designing for sustainability.
Every year. 3 Credits

GE-400 Geography Seminar
LASC Categories: CAP
Prerequisites: GE-102, GS-101, GS-140, GS-216, and GE-212 or GE-315
Capstone course for geography majors. Students prepare a comprehensive term paper and present on the topic. Course includes portfolio and career development.
Every year. 3 Credits

GE-408 Directed Study: Geography
Directed study offers students the opportunity to complete an existing course with an established syllabus under the direction and with the agreement of a faculty member.
3 Credits

GE-410 Independent Study: Geography
Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research.
Every year. 1-6 Credits

GE-420 Advanced Geoscience Research and Fieldwork
Lab and or field-based research on a specific geoscience topic under supervision of a faculty member. [Permission of instructor.]
Fall and Spring and every year. 1-6 Credits

GE-450 Readings and Directed Research
Directed study on selected topics; open to senior majors.
Fall and Spring and every 2-3 years. 3 Credits

GE-460 Internship: Geography
Students assigned to various government and private agencies under joint supervision of agency and faculty.
Fall and Spring and other or on demand. 1-6 Credits

GE-470 Selected Topics: Geography
Prerequisites: GE-102 or GL/GE-102
Topic or subject to be announced in advance; topic to be relevant to student needs and interests and availability of professor.
Spring only and every 2-3 years. 1-6 Credits

GS-101 Physical Geography
LASC Categories: NSP
Geographic principles of location; characteristics of landforms, soil, climate, minerals, water, flora, and fauna. [Formerly GE101.]
Fall and Spring and every year. 3 Credits

GS-110 Meteorology
LASC Categories: NSP, QAC
Weather elements, frontal storms, air mass characteristics, winds, temperature, precipitation, and presssure patterns throughout the world; weather instruments, forecasting.
Every year. 3 Credits

GS-140 Physical Geology
LASC Categories: LAB, NSP, QAC
Introduction to geological science: rocks and minerals, internal and external geologic processes, topographic map and air photo analysis, local field study. Three hours lecture and two hours laboratory per week. [Supersedes GS120 and GS121.]
Fall and Spring and every year. 4 Credits

GS-150 Humans and the Cold Regions
LASC Categories: NSP
Winter intersession. Examines eath's cold regions, including physical geography, cryosphere's role in earth systems, human adaptations. Includes outdoor activity.
Every year. 3 Credits

GS-165 Geographic Information Systems I
LASC Categories: NSP
Introduction to the digital production of maps using ArcGIS software.
Every year. 4 Credits

GS-193 First Year Seminar in Geography
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

GS-195 Special Topics
Introductory course to be offered on a trial basis. Topic to be announced in advance.
Every 2-3 years. 1-6 Credits

GS-210 Geomorphology
LASC Categories: NLL, QAC
Prerequisites: GS-101 or GS-140 and an accuplacer score of 3 or one college level Math course.
The study of landforms and the processes that form them. labs focus on interpretation of maps and aerial photographs. Three hour lecture and two hour laboratory.
Every year. 4 Credits

GS-218 Introduction to Remote Sensing
LASC Categories: NSP
Prerequisites: GS-101 or GS-140 or NS-150 or EV-150 or BI-101 or BI-140
Introduction to the use and analysis of remotely sensed images such as aerial photographs and satellite imagery.
Every year. 3 Credits

GS-225 Oceanography
LASC Categories: QAC
Prerequisites: GS-101 or GS-140 or GS-110 or NS-150
The principles of physical, chemical, biological, and geological oceanography.
Spring only and every year. 3 Credits

GS-230 Biogeography
Prerequisites: GS-101 or GS-110 or BI-101 or BI-140
The distribution patterns of plants and animals, processes affecting this distribution, and how these patterns change in space and time.
Every 2-3 years. 3 Credits

GS-235 Contemporary Climate Change
Prerequisites: GS-101 or GS-110 or NS-150 or CH-106.
The global climate system, factors influencing climate, recent climate change and the role of human activity.
Every 2-3 years. 3 Credits

GS-240 Coastal Environments
Prerequisites: GS-101 or GS-140
Summer session course examining the physical geography of coastal environments including human impacts. Includes field trips.
Every year. 3 Credits

GS-245 Planetary Geology
Prerequisites: GS-140 or PY-101
Solar system formation and evolution with emphasis on planetary interiors and surface features.
3 Credits

GS-250 Hydrology
Prerequisites: GS-101 or Gs-140 or GS-110 or NS-150
Hydrologic processes, their estimation and measurement. Includes precipitation, evaporation,runoff, groundwater and water resources management.
Other or on demand. 3 Credits

GS-260 Introduction to Soil Science
Prerequisites: GS-101 or GS-140
The study of the formation, processes, classification and composition of soils with emphasis on environmental applications, including watershed delineation.
Every year. 3 Credits

GS-270 The Sedimentary Record
LASC Categories: NLL
Prerequisites: GS-140 and GS-101 or GS-110
Theoretical, laboratory, and field investigations of modern sedimentary processes, depositional environments, the sedimentary record of earth history, principals of stratigraphy. 3 hours lecture and 3 hours lab.
Every 2-3 years. 4 Credits

GS-299 Special Topics
Intermediate level course to be offered on a trial basis. Topic to be announced in advance.
1-6 Credits

GS-318 Geographic Information Systems II
Prerequisites: GS-216
Advanced production of digital choropleth maps on PCs using a GIS vector oriented software.
Fall and Spring and every year. 3 Credits

GS-335 Hydrogeology
Prerequisites: GS-140 or GS-250 and an accuplacer code of 3, or a college level math course.
Underground water and its movement. Aquifer identification and test; wells, contamination and remediation, ground water as a geologic agent.
Fall only and other or on demand. 3 Credits

GS-365 Climate Change Over Earth History
LASC Categories: WAC
Prerequisites: EN-102 and either GS-140 or GS-235.
A record of change climate on Earth, methods used to reconstruct past climates relevance of past changes to the current climate.
Every 2-3 years. 3 Credits

GS-370 Lakes & Environmental Change
LASC Categories: WAC, NLL
Prerequisites: GS-140 Take one earth science course at the 200-level or above.
Modern physical, biogeochemical, and sedimentary processes in lakes. Lake sediments as archives of past climate and environmental change. Includes fieldwork.
4 Credits

GS-400 Geography Seminar
LASC Categories: CAP
Prerequisites: GE-102 GS-101 GS-140 GS-216 and GE-212 or GE-315 and senior standing
Capstone course for geography majors. Students develop research projects and present their findings. Includes career preparation.
Spring only and every year. 3 Credits

GS-408 Directed Study: Geography
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3-4 Credits

GS-410 Independent Study: Geography
Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research.
Every year. 1-4 Credits

GS-420 Advanced Geoscience Research and Fieldwork
Lab and or field-based research on a specific geoscience topic under supervision of a faculty member. [Permission of instructor.]
Fall and Spring and every year. 1-6 Credits

GS-450 Readings and Directed Research
Directed study on selected topics; open to senior majors.
Fall and Spring and every 2-3 years. 3 Credits

GS-460 Internship: Geography
Students assigned to various government and private agencies under joint supervision of agency and faculty.
Fall and Spring and other or on demand. 1-6 Credits

GS-470 Selected Topics: Geography
Prerequisites: GS-101 and one coursze from GS-210, GS-225, GS-230, GS-235, GS-250, GS-260, GS-290 or GS-310
Topic or subject to be announced in advance; topic to be relevant to student needs and interests and availability of professor.
Spring only and every 2-3 years. 1-6 Credits

Geography Honors Program

The Geography Honors Program is intended for outstanding majors interested in research as well as those who plan to pursue an advanced degree. Honors students will complete an original research project, defend the project before an approved review committee, and present the project in at least one venue external to WSU. Applicants should have completed the geography core courses through GE-200 and have 75 credits overall. Applicants should have a 3.5 GPA in the major although students with a 3.0 major GPA and a faculty sponsor may petition for admission. Application materials are available from the department chair.

Geography Major: Earth Science Education Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Core Courses		(18 credits)
GS-101	Physical Geography	3
or GS-110	Meteorology	
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geographic Literature Seminar	1
GE/GS-400	Geography Seminar	3

Requirements for the Concentration in Earth Science Education		(48 credits)
Ancillary requirements (may apply to LASC requirements)		
MA-190	Pre-calculus (or any MA course at 200 level or above)	4
BI-140	Introduction to Organismal Biology	4
BI-202	Principles of Ecology	4
PY-101	Introduction to Astronomy	3
Select one of the following:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
Required courses		
GS-110	Meteorology	3
GS-225	Oceanography	3
GS-250	Hydrology	3
GS-270	The Sedimentary Record	4
Electives		
4 earth science electives at the 200+ level, including one earth science course at the 300+ level. No more than one geography (GE) or geospatial course can be counted toward this requirement		12
Total Credits		66

Geography Major: Earth Science Education concentration

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
LASC [1]	LASC Elective (TLC) (p. 63)	3
PY-101	Introduction to Astronomy	3
GS-101	Physical Geography	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
GS-165	Geographic Information Systems I	4
GE-102	Human Geography	3
GS-140	Physical Geology	4
	Credits	17
Year Two		
Semester Three		
GS-110	Meteorology	3
GS-230	Biogeography	3
BI-140	Introduction to Organismal Biology (NSP/Lab)	4
PY-250	Instrumentation/Elec Measure	3
LASC [1]	LASC Elective (CA) (p. 50)	3
	Credits	16
Semester Four		
GS-210	Geomorphology (QLAC)	4
GS-225	Oceanography	3
MA-180	Introduction to Functions (if needed; or take BI-202 WAC)	3
LASC [1]	LASC Elective (USW) (p. 61)	3
LASC [1]	LASC Elective (GP) (p. 54)	3
	Credits	16
Year Three		
Semester Five		
GE-200	Geographic Literature Seminar	1
GS-250	Hydrology	3
MA-190	Pre-calculus	4
PY-221 or PY-241	General Physics I (NSP) or Physics I (Mechanics)	4
LASC [1]	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Six		
GS 2XX+	Earth Science Elective	3
CH-112	Survey of Chemistry	4
PY-222 or PY-242	General Physics II or Physics II (Electricity, Magnetism and Optics)	4
BI-202	Principles of Ecology	4
LASC [1]	LASC Elective (HBS) (p. 56)	3
	Credits	18
Year Four		
Semester Seven		
GS 2xx+	Earth Science Elective	3
GS 3xx+	Earth Science Elective	3
GS-270	The Sedimentary Record	4

SELECT	General Elective	3
SELECT	General Elective	3
	Credits	16
Semester Eight		
GE-400	Geography Seminar	3
GS 2xx+	Earth Science Elective	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	128

[1] The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography Major: Earth System Science Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Core Courses		(18 credits)
GS-101	Physical Geography	3
or GS-110	Meteorology	
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geographic Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in Earth System Science		(32 credits)
Ancillary requirements (may apply to LASC requirements)		
MA-190	Pre-calculus	4
Select one of the following:		4
CH-112	Survey of Chemistry	
CH-120	General Chemistry I	
PY-221	General Physics I	
PY-241	Physics I (Mechanics)	
Required core courses		
GS-210	Geomorphology	4
GS-225	Oceanography	3
GS-230	Biogeography	3
Core electives		
14 upper level credits at the 200+ level, including 3 earth science credits at the 300+ level. No more than one geography (GE) or Geospatial course can be counted toward this requirement.		14
Total Credits		50

Geography Major: Earth System Science Concentration

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
LASC [1]	LASC Elective (GP) (p. 54)	3
GE-102	Human Geography	3
GS-101	Physical Geography	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
MA-190	Pre-calculus	4
LASC [1]	LASC Elective (TLC) (p. 63)	3
GS-140	Physical Geology	4
	Credits	17
Year Two		
Semester Three		
GS-165	Geographic Information Systems I	4

GS-210	Geomorphology	
Select one of the following LASC courses: [1]		4
CH-120	General Chemistry I	
PY-221	General Physics I(NSP*LAB)	
PY-241	Physics I (Mechanics)	
GE-200	Geographic Literature Seminar	1
LASC [1]	LASC Elective (CA) (p. 50)	3
	Credits	12

Semester Four

GS-225	Oceanography	3
GS-230	Biogeography	3
LASC [1]	LASC Elective (USW) (p. 61)	3
LASC [1]	LASC Elective (HBS) (p. 56)	3
LASC [1]	LASC Elective (DAC) (p. 51)	4
	Credits	16

Year Three

Semester Five

SELECT	Earth System Science Elective	3
SELECT	Earth System Science Elective	3
LASC [1]	LASC Elective (QR) (p. 61)	3
LASC [1]	LASC Elective (WAC) (p. 66)	3
SELECT	General Elective	3
	Credits	15

Semester Six

SELECT	Earth System Science Elective	3
SELECT	Earth System Science Elective	3
LASC [1]	LASC Elective (NSP) (p. 59)	3
LASC [1]	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
	Credits	15

Year Four

Semester Seven

SELECT	Earth System Science Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Semester Eight

GE-400	Geography Seminar (CAP)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	120

[1] The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography Major: Environmental Studies Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Core Courses		(18 credits)
GS-101	Physical Geography	3
or GS-110	Meteorology	
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geographic Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Environmental Studies Concentration		(21-27 credits)
GE-258	Global Environmental Change	3
Two or three courses in Physical Geography or GIS (200-400 level)		6-9
Select three or four of the following:		9-12
GE-240	Energy Conservation	
GS-240	Coastal Environments	
GE-285	Sustainable Communities	

GE-307	American Public Lands:Environmental Issues	
GE-308	Environment and Development	
GE-312	Sustainable Food Systems	
GE-341	Fundamentals of Renewable Energy	
or GE-342	Sustainable Housing And Techniques	
GE/GS-470	Selected Topics: Geography (with approval)	
Select one of the following:		3
GE/GS-460	Internship: Geography	
GE-410/GS-460	Independent Study: Geography	
GE/GS-450	Readings and Directed Research	
Total Credits		39-45

Geography Major: Environmental Studies Concentration

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
LASC	LASC Elective (QR) (p. 61)	3
GE-102	Human Geography	3
GS-101	Physical Geography	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
LASC [1]	LASC Elective (TLC) (p. 63)	3
LASC [1]	LASC Elective (GP) (p. 54)	3
GS-140	Physical Geology	4
	Credits	16
Year Two		
Semester Three		
GS-165	Geographic Information Systems I	4
GE	Environmental Elective	3
GE or GS	Environmental or Physical Elective	3
GE-200	Geographic Literature Seminar	1
LASC [1]	LASC Elective (ICW) (p. 58)	3
LASC [1]	LASC Elective (CA) (p. 50)	3
	Credits	17
Semester Four		
GE-258	Global Environmental Change	3
GS	Physical or GIS Elective	3
LASC [1]	Lab Science (NSP) (p. 59)	3-4
LASC [1]	LASC Elective (USW) (p. 61)	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
	Credits	15-16
Year Three		
Semester Five		
LASC	LASC Elective (HBS) (p. 56)	
GE	Environmental Elective	3
LASC [1]	LASC Elective (QR) (p. 61)	3
LASC [1]	LASC Elective (WAC) (p. 66)	3
SELECT	General Elective	3
	Credits	12
Semester Six		
GS	Physical or GIS Elective	3
GE	Environmental Elective	3
LASC [1]	LASC Elective (NSP) (p. 59)	3
LASC [1]	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
Select one of the following:		4
GE-410 Independent Study: Geography or GS-410 or Independent Study: Geography		
GE-450 Readings and Directed Research or GS-4	or Readings and Directed Research	
GE-460 Internship: Geography or GS-460	or Internship: Geography	
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	16

Semester Eight		
GE-400	Geography Seminar (CAP)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121-122

[1] The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography Major: General Geography Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Core Courses		(18 credits)
GS-101	Physical Geography	3
or GS-110	Meteorology	
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geographic Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in General Geography		(15 credits)
At least one advanced course (200-400 level) in each of the following:		
Physical Geography (200 - 400 Level)		3
Human Geography (200 - 400 Level)		3
Three advanced courses in any category		9
Total Credits		33

Geography Major: General Geography Concentration [1]

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
LASC	LASC Elective (QR) (p. 61)	
GE-102	Human Geography	3
GS-101	Physical Geography	3
	Credits	12
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
LASC [2]	LASC Elective (TLC) (p. 63)	3
LASC [2]	LASC Elective (GP) (p. 54)	3
GS-140	Physical Geology	4
	Credits	16
Year Two		
Semester Three		
GS-165	Geographic Information Systems I	4
GS/GE	Elective (200 level or above)	3
LASC [2]	LASC Elective (HBS) (p. 56)	3
LASC [2]	LASC Elective (ICW) (p. 58)	3
LASC [2]	LASC Elective (CA) (p. 50)	3
GE-200	Geographic Literature Seminar	1
	Credits	17
Semester Four		
GS/GE	Elective (200 level or above)	3
LASC [2]	LASC Elective (NSP) (p. 59)	3-4
LASC [2]	LASC Elective (QR) (p. 61)	3
LASC [2]	LASC Elective (USW) (p. 61)	3
LASC [2]	LASC Elective (DAC) (p. 51)	3
	Credits	15-16

Year Three		
Semester Five		
GS/GE	Elective (200 level or above)	3
GS/GE	Elective (200 level or above)	3
LASC [2]	LASC Elective (NSP) (p. 59)	3-4
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15-16
Semester Six		
GS/GE	Elective (200 level or above)	3
LASC [2]	LASC Elective (WAC) (p. 66)	3
LASC [2]	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
GE-400 or GS-400	Geography Seminar or Geography Seminar	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	120-122

1 Students in this concentration typically have a second major, often education. For those students, many of the "general electives" would represent the second major and timing of LASC requirements may change.

2 The sequence of LASC courses marked with [2] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography Major: Geographic Information Systems Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (20 credit) core curriculum and one of four concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Ancillary Requirements		(6 credits)
To be taken by the time the student has accumulated 21 credits in the major.		
CS-135	Programming for Non-CS Majors	3
MA-150	Statistics I	3
Core Courses		(18 credits)
GS-101 or GS-110	Physical Geography or Meteorology	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geographic Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in Geographic Information Systems (GIS)		(21 credits)
GS-218	Introduction to Remote Sensing	3
GS-318	Geographic Information Systems II	3
Three Additional Courses		
4 courses at the 200 - 400 level in either physical or human Geography. Students are encouraged to focus on one area. Regional courses are not appropriate		12
Select one of the following:		3

GS/GE-410	Independent Study: Geography	
GS/GE-450	Readings and Directed Research	
GS/GE-460	Internship: Geography	
Total Credits		39

Geography Major: GIS Concentration

Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA-150	Statistics I	3
GE-102	Human Geography	3
GS-101	Physical Geography	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
LASC [1]	LASC Elective (TLC) (p. 63)	3
GS-165	Geographic Information Systems I	4
GS-140	Physical Geology	4
	Credits	17
Year Two		
Semester Three		
GS-218	Introduction to Remote Sensing	3
CS-135	Programming for Non-CS Majors (QR)	3
LASC [1]	LASC Elective (NSP) (p. 59)	3-4
LASC [1]	LASC Elective (CA) (p. 50)	3
LASC [1]	LASC Elective (HBS) (p. 56)	3
	Credits	15-16
Semester Four		
GS-318	Geographic Information Systems II	3
GS/GE 2XX+	Elective	3
LASC [1]	LASC Elective (ICW) (p. 58)	3
LASC [1]	LASC Elective (GP) (p. 54)	3
LASC [1]	LASC Elective (USW) (p. 61)	3
	Credits	15
Year Three		
Semester Five		
GE-200	Geographic Literature Seminar	1
GS/GE 2XX+	Elective	3
GS/GE 2XX+	Elective	3
LASC [1]	LASC Elective (NSP) (p. 59)	3
LASC [1]	LASC Elective (WAC) (p. 66)	3
SELECT	General Elective	3
	Credits	16
Semester Six		
GS/GE 2XX+	Elective	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
LASC [1]	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
Select one of the following:		3
GE-410 Independent Study: Geography or GS-410 or Independent Study: Geography		
GE-450 Readings and Directed Research or GS-4 or Readings and Directed Research		
GE-460 Internship: Geography or GS-460 or Internship: Geography		
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
GS-400	Geography Seminar (CAP)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

SELECT	General Elective	3
	Credits	15
	Total Credits	123-124

[1] The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Geography Minor

Requirements for the Geography Minor

GS-101	Physical Geography	3
GE-102	Human Geography	3
GS-165	Geographic Information Systems I	4
Three electives, 200 level or above, one each in physical and human geography and one in any category.		9
Total Credits		19

Health Sciences

Department of Health Sciences

The Department of Health Sciences offers the following programs in health: Bachelor of Science in Health Education, which combined with an optional minor in Education, can lead to initial licensure certification; Bachelor of Science in Public Health; and a dual-degree Bachelor of Science in Public Health followed by a Bachelor of Science in Nursing at the Massachusetts College of Pharmacy and Health Sciences University.

Major courses provide basic knowledge and basic practice skills that prepare students to pursue careers in a variety of health related professions.

Membership in a national health honor society, Eta Sigma Gamma, is available to students who maintain a minimum 3.0 average.

All health courses in the majors, minors, and concentration require a minimum grade of C/2.0. Courses may not be taken pass/fail; courses may be repeated.

Students in this department may major or minor in health sciences. No student may do both.

Required ancillary courses must average an overall minimum of 2.0. In the Public Health/Pre-Nursing program each course must receive a minimum grade of C.

Health Sciences graduates are eligible to take the Certified Health Education Specialist exam (CHES) administered by the National Commission for Health Education Credentialling (NCHEC).

- Health Concentration (p. 209)
- Health Education Major (p. 209)
- Health Education Minor (p. 211)
- Health Fitness Minor (p. 211)
- Public Health - Pre-Nursing Program (p. 211)
- Public Health Major (p. 213)
- Public Health Minor (p. 216)

Faculty

Laura Bothwell, Assistant Professor (2017), B.A., The College of St. Scholastica; M.A., Union Theological Seminary; M.Phil., Ph.D., Columbia University

Mariana Cecilia Calle, Assistant Professor (2012), B.S. University of Buenos Aires Argentina; M.S.,Ph.D. University of Connecticut

Syamak Moattari, Department Chair, Assistant Professor (2015), M.D. Shahid Beheshti Medical University; Dr.PH Boston University

Andrew J. Piazza, Assistant Professor (2017), B.S., M.S., University of Florida; Ph.D., University of Alabama

Jaime F. Vallejos, Assistant Professor (2017), B.S., M.D., University of Nicaragua; M.P.H., University of Massachusetts Amherst

HC-201 Introduction to Public Health
This course is an overview and will focus on populations, prevention, and the evidence-based practice of public health.
Every year. 3 Credits

HC-202 Introduction to Global Health
LASC Categories: GP, DAC, ICW
This course is an overview and will focus on the developing world from a population and prevention perspective.
Every year. 3 Credits

HC-203 Introduction to Epidemiology
LASC Categories: ICW, NSP, QAC, GP
Prerequisites: any Math course and HC-201.
Basic epidemiologic concepts are covered and application of concepts to everyday problems; e.g., hazards in food supplies and risks associated with lifestyle.
Every year. 3 Credits

HC-220 Health Policy
Prerequisites: HE-100
Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States.
Fall and Spring and every year. 3 Credits

HC-228 Health Ethics
Prerequisites: HE-100 or HC-201
Ethical issues in health including genetic research, euthanasia, medical intervention and reproductive technologies as well as professional ethics.
Fall and Spring and every year. 3 Credits

HC-234 Multiculturalism and Health
Examination of diverse ethnic/racial and cultural beliefs beliefs and practices affecting health and illness
Spring only and every year. 3 Credits

HC-338 Peer Education Training
Prerequisites: HE-100
Emphasis on student development of practical skills to implement programming centered on peer education programs and focused on preventative health.
Other or on demand. 3 Credits

HC-350 Group Process
Prerequisites: HE-100
A didactic and experiential examination of various theories of group dynamics and their application to the facilitation of health-related groups. Research paper.
Fall and Spring and every year. 3 Credits

HC-403 Department Workshop:Community Health
The subject matter of this course will be reflective of the changing issues within the field of community health.
Other or on demand. 3 Credits

HC-408 Directed Study: Public Health
Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

HC-415 Commnity Health Planning and Promotion
Prerequisites: 4 courses in the major at 200 level or above.
Emphasis on community analysis; defining and verifying community health problems and establishing goals and objectives. Research paper.
Fall and Spring and every year. 3 Credits

HC-425 Research Seminar
LASC Categories: CAP, WAC
Prerequisites: HC-228 or PH-131, HC 203 and one of the following MA-150, PS-275 or SO-275.
Students will be required to produce a proposal for a research study based on a community public health issue.
Every year. 3 Credits

HC-450 Practicum: Community Health
LASC Categories: CAP, WAC
Prerequisites: 24 credits in HE/HC courses and EN-102
Field experience in which students will select a community health speciality area and spend a semester pursuing their goal through participation. See HE 440 Practicum in Health.
Every year. 3-6 Credits

HE-100 Personal Health
LASC Categories: ICW
Physical, mental, and emotional aspects of well-being and how to maintain and increase the quality of one's lifestyle.
Fall and Spring and every year. 3 Credits

HE-120 Health and Nutrition
LASC Categories: ICW
Nutritional needs, weight control, healthy diets, myths, and nutritional aids to better health.
Fall and Spring and every year. 3 Credits

HE-140 Creative Arts and Health
LASC Categories: CA
An experiential and didactic introduction to the separate arts therapies: movement, art, music and language arts, emphasizing the creative process.
Every year. 3 Credits

HE-150 Health and Physical Education for the Teacher
The planning, development, implementation and evaluation of comprehensive health education programs.
Every year. 3 Credits

HE-170 Humans in Motion
Concepts of the human neuro-musculoskeletal system which provide function and health across the life span under normal and stress conditions.
Every year. 3 Credits

HE-193 First Year Seminar Health
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
3 Credits

HE-200 Consumer Health
Current information and guidelines to reliable sources necessary to develop intelligent consumers capable of wisely selecting health products and services.
Fall and Spring and every year. 3 Credits

HE-210 Women's Health Issues
Overview of women's health issues: women in the health marketplace, a woman's right to control her body, media images and illness, eating disorders, therapy, alcohol, aging and the women's health movement.
Fall and Spring and every year. 3 Credits

HE-220 Mental Health Education
LASC Categories: HBS, ICW
Prerequisites: HE-100
Examination of mental health as a variable: its creation and the obstacles to good mental health and positive self-concept.
Fall and Spring and every year. 3 Credits

HE-230 Human Sexuality and Sex Education
Prerequisites: HE-100
Focus on the need for and understanding of sex education, along with the process of implementing sexuality education, with emphasis upon teacher preparation.
Every year. 3 Credits

HE-240 Writing and Learning From Experience I
LASC Categories: WAC
Prerequisites: EN-102 and instructor permission
Prepares students to write analytically about their experience and to apply their learning to courses and competencies in the major.
Every year. 3 Credits

HE-242 Writing and Learning From Experience II
LASC Categories: TLC
Prerequisites: HE-240 and Instructor permission
Integrating experiential essays inot longer narratives, developing themes and conceptual frameworks; applying experiential learning to courses, competencies in the major.
Every year. 3 Credits

HE-260 First Aid: Advanced Theory and Skill
Common emergencies, cardiopulmonary resuscitation, auto extraction, and emergency childbirth. Opportunity for instructor rating.
Fall and Spring and other or on demand. 3 Credits

HE-275 Fitness for Life
Prerequisites: HE-120
Knowledge of health-related fitness components and their effect on total wellness; emphasis on developing personalized fitness program, namely cardiovascular endurance.
Every year. 3 Credits

HE-280 Individual Stress Management and Relaxation
Strategies and techniques for increasing stress resistance based on psychophysiological research.
Fall and Spring and every year. 3 Credits

HE-285 Drugs and Society
Prerequisites: HE-100 HE-200 BI-161 and BI-162
Drug use and abuse, and implications for the individual and society.
Every year. 3 Credits

HE-340 Health Counseling
Prerequisites: PS 101
A study of the counseling implications involved in health. Awareness of the counseling process and referral.
Other or on demand. 3 Credits

HE-350 Community Health Education
LASC Categories: GP, DAC, ICW
Prerequisites: HE-100
Opportunity for exploration of on-going community health education programs, and their impact upon that community. Prerequisite: Advanced standing
Every year. 3 Credits

HE-390 Environmental Health
Prerequisites: HE-100 or HC-201
Examination of the issues affecting the environment and their impact on our health.
Fall and Spring and every year. 3 Credits

HE-400 Special Topics
LASC Categories: ICW
Current issues in Health.
Every year. 3 Credits

HE-408 Directed Study: Health
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

HE-440 Practicum in Health
LASC Categories: CAP, WAC
A field experience option required of all Health Studies majors. Prerequisite: Advanced standing
Fall and Spring and every year. 3 Credits

HE-450 Independent Study in Health
Creative, independent learning experiences designed and initiated by the health majors.
Fall and Spring and every year. 1-6 Credits

Health Concentration

The Concentration is designed to develop an educated citizenry who will examine the determinants of health from global, national, community and local perspectives.

Requirements for the Health Concentration

Requirements		(15 credits)
HC-201	Introduction to Public Health	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
Electives	6 credits from approved interdisciplinary list	6
Total Credits		15

Health Education Major

The goal of the Health Education major is to prepare graduates to be critical and creative thinkers as well as lifelong learners in the dynamic field of health education. Coursework and fieldwork focus on developing the knowledge, understandings, competencies, and experiences required of professionals teaching health education in a variety of settings. Worcester State University also offers Initial Licensure for health education programs in middle and secondary education (grades 5-12); the Massachusetts Tests for Educator Licensured (MTEL) must be passed for licensure. All students in the Health Education major and Education minor will need an advisor from each of these departments.

Requirements for the Health Education Major

HE-100	Personal Health	3
HE-120	Health and Nutrition	3
HE-200	Consumer Health	3
HE-220	Mental Health Education	3
HE-230	Human Sexuality and Sex Education	3
HE-275	Fitness for Life	3
HE-285	Drugs and Society	3
HE-390	Environmental Health	3
HC-415	Commnity Health Planning and Promotion	3
HE-440	Practicum in Health	3
Major Electives Requirements (without Education minor)		*9*
(n.b. Evening and summer courses may be necessary)		
With Education minor (in lieu of Health electives and Health Practicum)		
PS-312	Psychology of Adolescence	3
ED-149	Introduction to the Teaching Profession Middle/ Secondary School	3
ED-250	Educational Psychology	3
ED-251	Principles of Curriculum, Instruction And Assessment in Middle and High School	3
ED-270	Diversity & Multicultural Ed	3
ED-351 & ED-352	Exceptionalities and Accommodating Diverse Learners in Secondary Schools and Exceptionalities and Accommodating Diverse Learners in Middle Schools	6
ED-353 & ED-354	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School and Assessment, Adjustment to Practice, and Classroom Management in the Middle School	6
ED-370 & ED-371	Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level and Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.	6
ED-424	Sem: Teaching Practicum	3
ED-480/485	Practicum Tchg Secondary Sch [1]	9
Required Ancillary Courses for Health Education major [2]		
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4

PS-101	General Psychology [3]	3
PS Elective (Education Minors PS 101, PS 210, and PS 312)		3
SO-100	Introduction to Sociology	3
Select one of the following:		3
SO-275	Social and Behavioral Statistics	
PS-275	Psychological Statistics (QAC or QR)	
MA-150	Statistics I (MA/QR)	
Total Credits		104

[1] Replaces HE-440 and HE-445.

[2] The following courses combined must average C or better.

[3] Education Minors: PS-101, PS-210, and PS-312.

Department of Health Sciences: Health Education Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA 1XX	Any Math Course (QR)	3
HE-100	Personal Health	3
PS-101	General Psychology	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
PS-275 or MA-150	Psychological Statistics or Statistics I	3-4
SO-100	Introduction to Sociology	3
HE-200	Consumer Health	3
BI-161	Human Anatomy and Physiology I	4
	Credits	16-17
Year Two		
Semester Three		
LASC	LASC Elective (CON) (p. 49)	3
HE-120	Health and Nutrition	3
HE-220	Mental Health Education	3
LASC	LASC Elective (ICW) (p. 58)	3
BI-162	Human Anatomy and Physiology II	4
	Credits	16
Semester Four		
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
HE-230	Human Sexuality and Sex Education	3
LASC	LASC Elective (NSP) (p. 59)	3
SELECT	Major Elective	3
	Credits	15
Year Three		
Semester Five		
LASC	LASC Elective (DAC) (p. 51)	3
HE-275	Fitness for Life	3
SELECT	Major Elective	3
HE-390	Environmental Health	3
PS-1XX	Psychology Elective	3
	Credits	15
Semester Six		
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (CA) (p. 50)	3
HE-285	Drugs and Society	3
SELECT	Major Elective	3
SELECT	LASC Elective (p. 47)	3
	Credits	15
Year Four		
Semester Seven		
HC-415	Commnity Health Planning and Promotion	3
Elective	LASC Elective (p. 47)	3
Elective	LASC Elective (p. 47)	3
Elective	LASC Elective (p. 47)	3
Elective	LASC Elective (p. 47)	3
	Credits	15
Semester Eight		
HE-440	Practicum in Health (CAP,WAC)	3
Elective	LASC Elective (p. 47)	3
Elective	LASC Elective (p. 47)	3
Elective	LASC Elective (p. 47)	3
	Credits	12
	Total Credits	119-120

Note: LASC Distribution Electives, do not have to follow this order.

Please see LASC section of this catalog for information on the Liberal Arts and Sciences Curriculum (LASC) and for policies governing the use of major courses toward LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Health Education Minor

Note: Students may not major **and** minor in this discipline.

The minor is designed to develop an in-depth understanding the Certified Health Education Specialist (CHES) competencies for planning health programs based on an assessment of community needs and capabilities and followed by a program implementation and evaluation.

Requirements

HC-415	Commnity Health Planning and Promotion	3
Electives	Health Education and/or Public Health courses	15
Total Credits		18

Health Fitness Minor

Note: Students may not major **and** minor in this discipline.

18 credits plus 7 prerequisite credits for PE-210 (BI-161, and either HE-170, or BI-271)

The minor encompasses both the knowledge and skills required in the growing field of Health Fitness. Applications focus on improving health and fitness at both the individual and population levels.

A minimum grade of 2.0 must be earned in required and elective courses. Prerequisites must average a minimum of 2.0

No new students are being accepted into this program for the 2017-2018 academic year.

Requirements for the Health Fitness Minor

Requirements		(18 credits)
HE-120	Health and Nutrition	3
PE-210	Foundations of Strength and Conditioning	3
PE-220	Survey of Athletic Training	3
Electives		
Select three of the following:		9
PE/HE-150	Health and Physical Education for the Teacher	
SO-190	Sport and Society	
PE/HE-260	First Aid: Advanced Theory and Skill	
PE/HE-275	Fitness for Life	
PE/HE-280	Individual Stress Management and Relaxation	
HE-285	Drugs and Society	
PE-420	Practicum in Health Fitness	
Total Credits		18

Public Health - Pre-Nursing Program

The Public Health - Pre-Nursing Program is a dual-degree based on a formal affiliation agreement that admits a limited number of students into an articulated program that begins with 83 credits at WSU in the Public Health/Pre-Nursing program and continues with the accelerated Bachelor of Nursing program at the Massachusetts College of Pharmacy and Health Sciences University ("MCPHS University") Worcester or Manchester, NH campus. At the completion of the appropriate 37 credits (of the 63 required) at MCPHS University, the student transfers those credits back to WSU, and earns a Bachelor of Science in Public Health. The student then completes the additional number of appropriate credits (26) at MCPHS University to earn the B.S. in Nursing. Students should see the advisor in the Health Sciences department assigned to the program.

The Bachelor of Science in Public Health requires the following 83 credits at WSU followed by the 63 credits in Nursing which will be taken at the MCPHS University campus in either Worcester or Manchester, NH.

WSU Dual Degree Entrance Requirements

High School GPA 3.0 and SAT CR and MA total of 1000 (or ACT 21). Students for whom English is not their first language must also submit a TOEFL with a score of 213 or higher or a minimum of 90 on the iBT.

An Intent to Transfer/Enroll at MCPHS University form must be submitted by May 1 for fall enrollment and by September 1 for spring enrollment and must include an official WSU transcript.

Admission to the accelerated BSN program is also contingent upon a satisfactory pre-admission interview conducted by MCPHS University at the campus to which a student intends to transfer and is subject to availability of openings in the program.

The MCPHS University Worcester /Manchester Admissions Committee retains the right to make the final decision on each student's transfer application.

The **B.S. in Public Health at WSU** is earned upon the successful completion of 37 credits at MCPHS University. The WSU Registrar requires an official transcript.

WSU Curriculum Requirements

- Complete 83 required credits at WSU with a minimum GPA of 2.5 during either 4 semesters and 2 summer sessions or 5 semesters.
- No grade below a C (2.0) in Public Health major courses or required ancillary courses -

BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
CH-112	Survey of Chemistry	4
PS-210	Developmental Psychology	3
PS-275 or MA-150	Psychological Statistics Statistics I	4

- Courses may not be re-taken.
- Transfer ancillary courses require prior written approval of MCPHS University.
- LASC courses may receive grades lower than C or be taken pass/fail.

Requirements Completed at WSC (83)

Course	Title	Credits
Year One		
Semester One		
FYS	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
HC-201	Introduction to Public Health	3
HI-111 or HI-112	US History I or US History II	3
PS-101	General Psychology	3
	Credits	15
Semester Two		
BI-161	Human Anatomy and Physiology I	4
CH-112	Survey of Chemistry	4
EN-102	English Composition II	3
HE-100	Personal Health	3
	Credits	14
Semester Three		
PS-210	Developmental Psychology	3
SO-100	Introduction to Sociology	3
LASC	LASC Elective (QR) (p. 61)	3
	Credits	9
Year Two		
Semester Four		
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
HC-202	Introduction to Global Health	3
HC-415	Commnity Health Planning and Promotion	3
PS-275 or MA-150	Psychological Statistics or Statistics I	4
	Credits	18
Semester Five		
HE-120	Health and Nutrition	3
HC-203	Introduction to Epidemiology	3
HC-425	Research Seminar	3
HE-390	Environmental Health	3
LASC	LASC Elective (CA) (p. 50)	6

LASC	LASC Elective (GP) (p. 54)	
	Credits	18
Semester Six		
HE-210	Women's Health Issues	3
LASC	LASC Elective (TLC) (p. 63)	6
LASC	LASC Elective (USW) (p. 61)	
	Credits	9
	Total Credits	83

Students in Track I will complete the above courses with the addition of two summer sessions at WSU.

Students in Track II will complete the above courses during a third Fall semester at WSU.

Requirements Completed at MCPHSU

Course	Title	Credits
Fall or Spring		
NUR 205	Nursing History, Knowledge & Narrative	3
NUR 208	Essential Concepts of Nursing	3
NUR215/215L	Nursing Skills & Technologies	4
NUR 226	Pathophysiology & Pharmacology	6
	Credits	16
Spring or Summer		
NUR 325/335L	Provider of Care I: Adult & Elder Health	8
NUR350	Scholarly Inquiry	3
	Credits	11
Summer or Fall		
NUR 330	Nursing History, Knowledge & Narrative	3
NUR 335	Essential Concepts of Nursing	6
NUR 345	Nursing Skills & Technologies	6
	Credits	15
Fall or Spring II		
NUR 425	Provider of Care IV: Community/Home Health	8
NUR 445	Provider of Care V: Coordinator of Care	6
NUR 450	Member of a Profession: Capstone Project	4
	Credits	18
	Total Credits	60

Please see LASC section of this catalog for information on the Liberal Arts and Sciences Curriculum (LASC) and for policies governing the use of major courses toward LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Public Health Major

The goal of the 39-credit Public Health Major is to prepare health practitioners in the public health disciplines of wellness, health promotion, and holistic disease prevention; as well as in community health services through cooperative, multi-disciplinary experiences. Coursework focuses on examining the social, behavioral, and environmental determinants associated with pressing health problems to plan, implement and evaluate appropriate health promotion programs and preventive services to improve population health.

Requirements for the Public Health Major

Major Required Courses		(24-27 credits)
HC-201	Introduction to Public Health	3
HC-202	Introduction to Global Health (DAC)	3
HC-203	Introduction to Epidemiology (GP, NSP, QAC, ICW)	3
HC-228	Health Ethics	3
or PH-131	Medical Ethics	
HE-390	Environmental Health	3
HC-415	Commnity Health Planning and Promotion	3
HC-425	Research Seminar (CAP/WAC)	3
HC-450	Practicum: Community Health (CAP/WAC)	3-6
Electives		(31-39 credits)

Majors Electives

Select one or two courses from the following:		3-6
HE-120	Health and Nutrition	
HC-220	Health Policy	
HC-234	Multiculturalism and Health	
HC-350	Group Process	
HE-350	Community Health Education (GP, ICW, DAC)	
HC-403	Department Workshop:Community Health	
HE-450	Independent Study in Health	
Interdisciplinary Electives		
See Health Sciences Department for list of approved courses.		9-13
Required Ancillary Courses		
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II (NSP Lab)	4
BI-206	Medical Microbiology (NSP Lab)	3-4
or BI-207	Public Health Microbiology	
CH-112	Survey of Chemistry	4
PS-275	Psychological Statistics (QR/QAC or MA/QR)	4
or MA-150	Statistics I	
or SO-275	Social and Behavioral Statistics	
Total Credits		55-66

Department of Health Sciences: Public Health Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I (WR)	3
MA 1XX	Any Math Course (MA/QR)	3
HC-201	Introduction to Public Health	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Two		
EN-102	English Composition II (WR)	3
PS-101	General Psychology (HBS)	3
HC-202	Introduction to Global Health (DAC)	3
CH-112	Survey of Chemistry (NSP #1)	4
BI-161	Human Anatomy and Physiology I	4
	Credits	17
Year Two		
Semester Three		
LASC	Distribution Elective (CON)	3
HC-203	Introduction to Epidemiology (GS, NSP, QAC, ICW)	3
BI-162	Human Anatomy and Physiology II (NSP #2)	4
LASC	Distribution Elective (CA) (p. 50)	3
BI-206 or BI-207	Medical Microbiology (NSP/Lab) or Public Health Microbiology	4
	Credits	17
Semester Four		
LASC	Distribution Elective (GP) (p. 54)	3
HC-228 or PH-131	Health Ethics or Medical Ethics	3
Elective	Major/Interdisciplinary Elective #1	3
Elective	Major/Interdisciplinary Elective #2	3
PS-275 or MA-150	Psychological Statistics (QR #2/QAC) or Statistics I	4
	Credits	16
Year Three		
Semester Five		
LASC	Distribution Elective (TLC) (p. 63)	3
Elective	Major/Interdisciplinary Elective #2	3
Elective	Distribution Elective #3	3
HE-390	Environmental Health	3
	Credits	12
Semester Six		
LASC	Distribution Elective (USW) (p. 61)	3
HC-425	Research Seminar	3

Elective	Major/Interdisciplinary Elective #4	3
Elective	Distribution Elective (p. 47)	3
Elective	Distribution Elective (p. 47)	3
	Credits	15

Year Four

Semester Seven

HC-415	Commnity Health Planning and Promotion	3
Elective	Distribution Elective (p. 47)	3
Elective	Distribution Elective (p. 47)	3
Elective	Distribution Elective (p. 47)	3
Elective	Major/Interdisciplinary Elective #5	3
	Credits	15

Semester Eight

HC-450	Practicum: Community Health	3
Elective	Distribution Elective (p. 47)	3
Elective	Distribution Elective (p. 47)	3
Elective	Free Elective	3
	Credits	12
	Total Credits	119

Note: LASC Distribution Electives, do not have to follow this order.

Please see LASC section of this catalog for information on the Liberal Arts and Sciences Curriculum (LASC) and for policies governing the use of major courses toward LASC requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

HC-201 Introduction to Public Health
This course is an overview and will focus on populations, prevention, and the evidence-based practice of public health.
Every year. 3 Credits

HC-202 Introduction to Global Health
LASC Categories: GP, DAC, ICW
This course is an overview and will focus on the developing world from a population and prevention perspective.
Every year. 3 Credits

HC-203 Introduction to Epidemiology
LASC Categories: ICW, NSP, QAC, GP
Prerequisites: any Math course and HC-201.
Basic epidemiologic concepts are covered and application of concepts to everyday problems; e.g., hazards in food supplies and risks associated with lifestyle.
Every year. 3 Credits

HC-220 Health Policy
Prerequisites: HE-100
Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States.
Fall and Spring and every year. 3 Credits

HC-228 Health Ethics
Prerequisites: HE-100 or HC-201
Ethical issues in health including genetic research, euthanasia, medical intervention and reproductive technologies as well as professional ethics.
Fall and Spring and every year. 3 Credits

HC-234 Multiculturalism and Health
Examination of diverse ethnic/racial and cultural beliefs beliefs and practices affecting health and illness
Spring only and every year. 3 Credits

HC-338 Peer Education Training
Prerequisites: HE-100
Emphasis on student development of practical skills to implement programming centered on peer education programs and focused on preventative health.
Other or on demand. 3 Credits

HC-350 Group Process
Prerequisites: HE-100
A didactic and experiential examination of various theories of group dynamics and their application to the facilitation of health-related groups. Research paper.
Fall and Spring and every year. 3 Credits

HC-403 Department Workshop:Community Health
The subject matter of this course will be reflective of the changing issues within the field of community health.
Other or on demand. 3 Credits

HC-408 Directed Study: Public Health
Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

HC-415 Commnity Health Planning and Promotion
Prerequisites: 4 courses in the major at 200 level or above.
Emphasis on community analysis; defining and verifying community health problems and establishing goals and objectives. Research paper.
Fall and Spring and every year. 3 Credits

HC-425 Research Seminar
LASC Categories: CAP, WAC
Prerequisites: HC-228 or PH-131, HC 203 and one of the following MA-150, PS-275 or SO-275.
Students will be required to produce a proposal for a research study based on a community public health issue.
Every year. 3 Credits

HC-450 Practicum: Community Health
LASC Categories: CAP, WAC
Prerequisites: 24 credits in HE/HC courses and EN-102
Field experience in which students will select a community health speciality area and spend a semester pursuing their goal through participation. See HE 440 Practicum in Health.
Every year. 3-6 Credits

Public Health Minor

Note: Students may not major **and** minor in this discipline.

The minor is designed to develop an in-depth understanding of the core areas and competencies of the public health discipline by introducing students to various determinants affecting health from global, national, community, and local perspectives.

Requirements for the Public Health Minor

Requirements		(21 credits)
HC-201	Introduction to Public Health	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
HC-415	Commnity Health Planning and Promotion	3
Electives	from Interdisciplinary and health courses	9
Total Credits		21

Mathematics

Department of Mathematics

The Department prepares its students for advanced study and research as well as for careers in business, industry, government, and teaching. Students are encouraged to seek the advice of their faculty advisor in the selection of a concentration and elective courses that will best prepare them for their career choices.

Mathematics is the language of science and also plays a key role in many of the social sciences. An understanding of mathematics provides a powerful approach to solving problems through organization, simplification, and abstraction. In today's job market, individuals with highly developed analytical and problem-solving skills are in great demand. Therefore, there are numerous career options for students who choose to major in mathematics.

The Mathematics Department offers two majors. One is a Mathematics Major with three possible concentrations: Traditional, Secondary Education, and Statistics and Modeling. The other is Mathematics for Elementary Education: 1-6 which also requires a student to complete the Elementary Education Major.

Computer software is used in many courses. These programs include Maple, Geogebra, Sage, SPSS, Matlab, Geometer's Sketchpad, and DPGraph.

Mathematics Placement

All new students must take the Accuplacer Arithmetic test followed by the Accuplacer Elementary Algebra test. Students who score well on these two basic tests will take an Algebra II/Pre-Calculus test called the College Level Math test. To take a mathematics course at Worcester State University, a student must complete the placement test process prior to registration. Results will be used to determine appropriate course placement.

- Financial Mathematics Minor (p. 220)
- Mathematics for Elementary Education Major (p. 220)
- Mathematics Major: Concentration in Secondary Education (p. 222)
- Mathematics Major: Concentration in Statistics and Modeling (p. 223)
- Mathematics Major: Concentration in Traditional Mathematics (p. 225)
- Mathematics Minor (p. 226)
- Middle School Mathematics Minor (p. 226)

Faculty

Tim Antonelli, Assistant Professor (2015), B.S.E. Duke University; Ph.D. North Carolina State University

Noah Daleo, Assistant Professor (2015), B.S. Kennesaw State University; Ph.D. North Carolina State University

Mary S. Fowler, Professor (2004), B.A. New York University; M.S.,Ph.D. Carnegie Mellon University

Maria G. Fung, Associate Professor (2008), B.A. Clark University; M.S.,Ph.D. Cornell University

Elizabeth Gilbert, Assistant Professor (2016), B.S.,M.S. Villanova University; Ph.D. Temple University

Hy Ginsberg, Associate Professor (2011), B.S. State University of New York Stony Brook; M.S.,Ph.D. University of Vermont

Nargess Hakim, Instructor (2017), A.S., Elm & Sanat, Tehran, Iran; B.S., Ministrry of Education, Tehran, Iran; M.A., Worcester Polytechnic Institute

Jason A. Hardin, Assistant Professor (2014), B.A. University of Cincinnati; M.S.,Ph.D. University of Nebraska Lincoln

Caitlin Krul, Assistant Professor (2016), B.S. Salem State College; M.S.,Ph.D. University of Rhode Island

Eileen B. Perez, Developmental Mathematics Program Director, Assistant Professor (2013), B.S., M.S. Union College; Ed.D. Nova Southeastern University

Hansun T. To, Professor (2004), B.A. Rosemont College; M.A.,Ph.D. Temple University

Michael Winders, Department Chair, Professor (2004), B.S.,M.S.,Ph.D. University of Iowa

MA-098 Arithmetic Developmental Math
Prerequisites: Pass accuplacer with a code of 1 or above.
Whole numbers, fractions, decimals, percents, rates, ratios, proportions, word problems, graphs, tables, signed numbers, variables and expressions.
Every year. 3 Credits

MA-099 Developmental Mathematics
Prerequisites: Pass Accuplacer with a code 2 or above
A review of arithmetic and elementary algebra preliminary to MA110. Three developmental credits, not counted toward degree.
Other or on demand. 3 Credits

MA-105 Survey of Mathematics
LASC Categories: QR
Prerequisites: Pass Accuplacer with code 3 or above
Financial management, probability theory, voting methods and other topics selected to improve the quantitative literacy of students.
Fall and Spring and every year. 3 Credits

MA-130 Number and Operations for Teachers
LASC Categories: QR
Prerequisites: Pass Accuplacer with code 5 or above
Develops understanding of the mathematical content of number and operations at the deep level required for successful elementary and middle school teaching.
Fall and Spring and every year. 3 Credits

MA-131 Patterns, Functions and Algebra for Teachers
LASC Categories: QR
Prerequisites: MA-130 Minimum grade C
Develops understanding of the mathematical content of patterns, functions and alegebra at the deep level required for successful elementary and middle school teaching. Credit will not be awarded for MA-180 (formerly MA-110) and MA 131.
Fall and Spring and every year. 3 Credits

MA-132 Geometry, Measurement, Probability and Statistics for Teachers
LASC Categories: QR
Prerequisites: MA-130 with a C or above.
Develops understanding of the mathematical content of geometry, measurement, probability and statistics at the deep level required for successful elementary and middle school teaching.
Fall and Spring and every year. 3 Credits

MA-150 Statistics I
LASC Categories: QR
Prerequisites: Pass Accuplacer with code 4 or above
Descriptive techniques, elementary probability, distribution of the sample mean, confidence intervals, hypothesis testing, linear regression and correlation. Credit will not be awarded for both MA-150 and MA-302.
Fall and Spring and every year. 3 Credits

MA-180 Introduction to Functions
LASC Categories: QR
Prerequisites: Pass accuplacer with a score of 5 or above.
Properties and applications of linear, quadratic, polynomial, rational, exponential, and logarithmic functions; systems of linear equations.
Fall and Spring and every year. 3 Credits

MA-190 Pre-calculus
LASC Categories: QR
Prerequisites: MA 110 or MA-180 with a grade of at least C- or Accuplacer code 6 or above
Review of exponential and logarithmic functions; trigonometric functions, identities, and equations; systems of linear equations and ineualities; conic sections; and applications.
Every year. 4 Credits

MA-193 Special Topics in Math for First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
3 Credits

MA-200 Calculus I
LASC Categories: QR
Prerequisites: MA 190 with a grade of at least C- or Accuplacer code 7
Limits, continuity, differentiation and integration of functions, the Fundamental Theorem of Calculus, L'Hôpital's Rule, applications including related rates, optimization, and area. Credit willnot be given for both MA-200 and MA-202.
Fall and Spring and every year. 4 Credits

MA-201 Calculus II
LASC Categories: QR
Prerequisites: MA 200 with a grade of at least C-
Techniques of integration, infinite sequences and series, power series, applications including volume and functional approximation.
Fall and Spring and every year. 4 Credits

MA-202 Business Calculus
Prerequisites: MA 110 or MA-180 with a grade of at least C- or Accuplacer code 6 or above
Review of functions, limits, derivatives, integration and introduction to multivariate calculus. Business applications of these topics.
Fall and Spring and every year. 4 Credits

MA-240 Theory of Proof
Prerequisites: MA-200 minimum grade C-
Logic and Proof, Set Theory, Math Induction, Relations, Functions, Sequences and Convergence, Limits and Continuity, Congruences, Introductions to Groups.
Fall and Spring and every year. 4 Credits

MA-260 Linear Algebra
Prerequisites: MA 240 with a grade of at least C.
Solutions of simultaneous equations by means of matrices and determinants; vector spaces, linear transformations; also, as time permits, characteristic values, bilinear and quadratic forms.
Every year. 3 Credits

MA-302 Probability and Statistics
Prerequisites: MA 200 with a grade of at least C-
Descriptive statistics, probability theory including an introduction to calculus based probability theory, combinatorics, correlation, regression and inference techniques. Credit will not be awarded for both MA-150 and MA-302.
Fall and Spring and every year. 3 Credits

MA-303 Mathematical Modeling
Prerequisites: MA 201 with a grade of at least C-
The development analysis and application of continuous and discrete-time models from the physical, financial, and life sciences.
Spring only and every year. 3 Credits

MA-304 Data Analysis
Prerequisites: MA-302 CS-265 Minimum grade C-;
Case studies combining applied statistics, mathematical statistics, mathematics, computing, and communications to simulate work experience of a practicing statistician.
Other or on demand. 3 Credits

MA-310 Calculus III
Prerequisites: MA 201 with a grade of at least C-
Vectors, parametric equations, polar, cylindrical and spherical coordinates, multivariable functions, properties and applications, partial derivatives, multiple integrals.
Fall only and every year. 4 Credits

MA-320 Ordinary Differential Equations
Prerequisites: MA 310 with a grade of at least C-
Techniques for solving ordinary differential equations, including Laplace transformations and power series solutions.
Spring only and other or on demand. 3 Credits

MA-340 Modern Geometry
Prerequisites: MA 240 with a grade of at least C.
Topics from Euclidean and non-Euclidean geometry.
Fall only and every year. 3 Credits

MA-360 Number Theory
Prerequisites: MA 240 with a grade of at least C.
Divisibility properties of integers, prime numbers, the Euclidean algorithm, the unique factorization theorem, congruences, Diophantine equations, number theoretic functions.
Spring only and every year. 3 Credits

MA-380 Probability
Prerequisites: MA 310 with a grade of at least C-
couning, continuous an discrete probability concepts including: consitional probability, independence, expectation and variance of univariate and multivariate distributions. This is the first course in a two-course sequence that prepares students for the first actuarial exam.
Fall only and other or on demand. 3 Credits

MA-381 Probability Theory for Actuarial Science
Prerequisites: MA-380 with a grade of at least C-.
Probabilities, conditional probabilities, moment-generating functions, moments and expectations of specific parametric distributions including Poisson, geometric, hypergeometric, exponential, and normal. This is the second course in a two-course sequence that prepares students for the first actuarial exam.
Spring only and other or on demand. 3 Credits

MA-405 Abstract Algebra
Prerequisites: MA 240 with a grade of at least Cb- and MA 260 with a grade of at least C-.
Introduction to groups, rings, and fields.
Spring only and every year. 3 Credits

MA-408 Directed Study: Mathematics
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
1-6 Credits

MA-410 Real Analysis
Prerequisites: MA 310 and MA-240 with a grade of at least B-
Rigorous treatment of sequences, topology of the real numbers, continuity; also, as time allows, differentiation, integration.
Fall only and every year. 3 Credits

MA-470 Capstone Experience
LASC Categories: CAP, WAC
Prerequisites: Senior standing within the major. EN-102 or EN-250
Students complete an independent mathematics research/problem-solving project, including oral presentations and a final written paper.
Fall only and every year. 3 Credits

MA-497 Selected Topics in Mathematics
Prerequisites or Corequisite: MA-240 and MA-260 (MA-260 may be taken concurrently). Pre-requisite will vary according to content.
Selection of topics of mutual interest to students and faculty.
3 Credits

MA-498 Internship: Mathematics
Working in and for an organization where ones skills can be tested in real-world situations. Students will have an opportunity to gain experience, to increase knowledge in various functional areas, and establish important contacts with an organization. [Consent of instructor.]
3 Credits

MA-499 Independent Study in Mathematics
Offers advanced students an opportunity to examine topics not normally covered in other mathematics courses. Geared to interests of both the student and the instructor.
Fall and Spring and every year. 1-6 Credits

Financial Mathematics Minor

Requirements for a Financial Mathematics Minor

MA-200	Calculus I	4
MA-201	Calculus II	4
MA-310	Calculus III	4
MA-380	Probability	3
MA-381	Probability Theory for Actuarial Science	3
Total Credits		18

Mathematics for Elementary Education

The Mathematics Elementary Education; 1-6 Major

This major serves as a second major for Elementary Education majors. It prepares pre-service teachers to be mathematical leaders in elementary schools.

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for Mathematics for Elementary Education

MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-360	Number Theory	3
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School	9
Total Credits		46

Note: The pre-requisite for MA-190 is MA-180. However, credit will not be given for both MA-131 and MA-180. If a student wishes to register for MA-190 upon completion of MA-131, He/she must receive a C- or better in MA-131 and complete a packet of supplementary materials that will be reviewed by either the MA-190 instructor or department chair.

MA-130, MA-131, and MA-132 must be completed with grades of at least B-, a student may retake any one of these courses at most once to increase a grade below a B-, and may retake at most two of these courses.

MA-190, MA-200,and MA-240 must be completed with grades of at least C-, a student may retake any on one of these courses at most once to increase a grade below a C-, and may retake at least two of these courses.

Students taking ED-425 and ED-435 must complete all prerequisite coursework for the Elementary Education Major Teacher Licensure Program and pass 053 Mathematics (Elementary) MTEL.

Sample Timeline for the Mathematics for Elementary Education Major

Course	Title	Credits
Year One		
Semester One		
FYS	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I (WR)	3
MA-130	Number and Operations for Teachers	3
HSBP Elective		3
ED-155	Teaching and Learning in Elementary School	3
	Credits	15
Semester Two		
EN-102	English Composition II (WR)	3
HI/ PO-218	US Constitutional History I (CON)	3
ED-250	Educational Psychology	3
MA-190	Pre-calculus	4
MA-131	Patterns, Functions and Algebra for Teachers	3
	Credits	16
Year Two		
Semester Three		
MA-200	Calculus I	4
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed	3
	Credits	16
Semester Four		
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-201	Calculus II	4
ED-304	Best Practices for English Language Learners	3
LASC	LASC Elective (TLC) (p. 63)	3
ED-325	Elementary Math	3
	Credits	16
Year Three		
Semester Five		
MA-240	Theory of Proof	4
ED-306	Elementary Reading, Language Arts and Literature	6
MA-302	Probability and Statistics (QLAC)	3
LASC	LASC Elective (WAC) (p. 66)	3
	Credits	16
Semester Six		
ED-330	Elementary Social Studies and Mulriculturalism	3
MA-360	Number Theory	3
LASC	LASC Elective (ICW) (p. 58)	3
MA-303	Mathematical Modeling (QLAC)	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	18
Year Four		
Semester Seven		
ED-320	Elementary Science	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (NSP LAB) (p. 59)	4
SELECT	Free Elective	3
	Credits	13
Semester Eight		
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School (Capstone)	9
	Credits	12
	Total Credits	122

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Mathematics Major: Concentration in Secondary Education

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
Core Courses		(25 credits)
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
Ancillary Course		
CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Secondary Education

MA-302	Probability and Statistics	3
MA-340	Modern Geometry	3
MA-405	Abstract Algebra	3
MA-360	Number Theory	3
MA-303	Mathematical Modeling	3
Three additional credits of mathematics at the MA 290-level or above, to be chosen in consultation with the academic advisor.		3
Total Credits		18

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Department of Mathematics: Mathematics Major Concentration in Secondary Education Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	16
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
MA-201	Calculus II	4
MA-240	Theory of Proof [1]	4
SELECT	General Elective	3
	Credits	17
Year Two		
Semester Three		
MA-310	Calculus III	4
MA-260	Linear Algebra	3
LASC	LASC Elective (NSP) (p. 59)	3-4
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (NSP) (p. 59)	3
	Credits	16-17

Semester Four		
MA-360	Number Theory	3
MA-303	Mathematical Modeling (or MA Elective) [2,3]	3
SELECT	General Elective	3
LASC	LASC Elective (NSP LAB) (p. 59)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Year Three		
Semester Five		
MA-302	Probability and Statistics	3
SELECT	General Elective	3
MA-340	Modern Geometry	3
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	15
Semester Six		
MA-405	Abstract Algebra [4]	3
MA-303	Mathematical Modeling [5]	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	15
Year Four		
Semester Seven		
MA-410	Real Analysis [6]	3
MA-3XX + [7]	MA Major Elective	3
MA-470	Capstone Experience (WAC)	3
SELECT	General Elective	3
LASC	LASC Elective (DAC) (p. 51)	3
	Credits	15
Semester Eight		
SELECT	General Elective	3
LASC	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12
	Total Credits	121-122

1 DualMath/CS majors may substitute Discrete Math I with permission of department.

2 MA-303 is offered every other Spring.

3 Only one elective is required; it may be taken in either the Spring or Fall.

4 Only one of MA-405 and MA-410 is required.

5 If not taken in semester 4.

6 Only one elective is required; it may be taken in either the Spring or Fall.

7 Only one of MA-405 and MA-410 is required.

8 Student should discuss capstone project with advisor during preceding semester.

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Students should consult with their advisors about minoring in secondary education.

Mathematics Major: Concentration in Statistics and Modeling

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
Core Courses		(25 credits)
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
Ancillary Course		

CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Statistics and Modeling

MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-304	Data Analysis	3
MA-380	Probability	3
MA-410	Real Analysis	3
Three additional credits of mathematics at the MA 290-level or above, to be chosen in consultation with the academic advisor.		3
Total Credits		18

Department of Mathematics: Mathematics Major Concentration in Statistics and Modeling Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	16
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
MA-201	Calculus II	4
MA-240	Theory of Proof [1]	4
LASC	LASC Elective (USW) (p. 61)	3
	Credits	17
Year Two		
Semester Three		
MA-310	Calculus III	4
MA-260	Linear Algebra	3
LASC	LASC Elective (NSP) (p. 59)	3-4
CS-265	Database Applications	3
MA-302	Probability and Statistics	3
	Credits	16-17
Semester Four		
Elective		3
MA-303 or MA-304	Mathematical Modeling [2,3] or Data Analysis	3
SELECT	General Elective	3
LASC	LASC Elective (NSP LAB) (p. 59)	3
SELECT	General Elective	3
	Credits	15
Year Three		
Semester Five		
MA-380	Probability (300 Level Elective in Major) [4,5]	3
SELECT	Elective	3
SELECT	Elective	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Six		
MA [4]	Upper Level Elective	3
MA-303 or MA-304	Mathematical Modeling or Data Analysis	3
SELECT	Elective	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	15
Year Four		
Semester Seven		
MA-410	Real Analysis	3
MA-380	Probability	3
MA-470	Capstone Experience [6]	3
LASC	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
	Credits	15

Semester Eight		
LASC	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12
	Total Credits	121-122

1 Dual Math/CS majors may substitute Discrete Math I with permission of department.

2 MA-304 is offered every other Spring.

4 Only one elective is required; it may be taken in either the Spring or Fall

5 MA-380 is offered every other Spring.

6 Student should discuss capstone project with advisor during preceding semester.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Mathematics Major: Concentration in Traditional Mathematics

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
Core Courses		(25 credits)
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
Ancillary Course		
CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for a Concentration in Traditional Mathematics

MA-320	Ordinary Differential Equations	3
MA-405	Abstract Algebra	3
MA-410	Real Analysis	3
Nine additional credits of mathematics at the MA 290-level or above, to be chosen in consultation with the academic advisor.		9
Total Credits		18

Department of Mathematics: Mathematics Major Traditional Concentration Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
LASC	LASC Elective (NSP) (p. 59)	3
	Credits	16
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
MA-201	Calculus II	4
MA-240	Theory of Proof [1]	4
LASC	LASC Elective (CA) (p. 50)	3
	Credits	17

Year Two		
Semester Three		
MA-310	Calculus III	4
MA-260	Linear Algebra	3
LASC	LASC Elective (NSP LAB) (p. 59)	3-4
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	16-17
Semester Four		
MA-320	Ordinary Differential Equations [2]	3
MA	300 Level Elective in Major	3
SELECT	General Elective	3
LASC	LASC Elective (p. 47)	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	15
Year Three		
Semester Five		
MA	300 Level Elective in Major	3
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	15
Semester Six		
MA-405	Abstract Algebra	3
MA-320	Ordinary Differential Equations [3]	3
SELECT	General Elective	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Year Four		
Semester Seven		
MA-410	Real Analysis	3
MA	300 Level Elective in Major	3
MA-470	Capstone Experience (WAC) [4]	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
LASC	LASC Elective (QLAC) (p. 60)	3
LASC	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	12
	Total Credits	121-122

1. DualMath/CS majors may substitute Discrete Math I with permission of department.
2. MA-320 is offered every other Spring.
3. If not taken in semester 4.
4. Student should discuss capstone project with advisor during preceding semester.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Mathematics Minor

Requirements for a Traditional Minor in Mathematics

MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
Electives		7
Minimum of 7 credits at the level of MA 260 or above		7
Total Credits		26

Middle School Mathematics Minor

Requirements for a Middle School Mathematics Minor

MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-200	Calculus I	4
MA-201	Calculus II	4
Select one of the following:		3/4

MA-240	Theory of Proof	
MA-303	Mathematical Modeling	
Total Credits		20-21

Natural Science

Department of Earth, Environment and Physics

See Environmental Science (p. 190).

Students with questions should meet with their advisor.

Nursing

Dr. Lillian R. Goodman Department of Nursing

Accreditation

- Full approval status from the Commonwealth of Massachusetts Board of Registration in Nursing located at 239 Causeway St. Boston, MA 02114
- Accredited by the Commission on Collegiate Nursing Education (CCNE). One Dupont Circle, NW, Suite 530, Washington, DC 20036
- Member of the Massachusetts Association of Colleges of Nursing (MACN).

General Information

Admissions

The nursing program leads to a Bachelor of Science degree.

The program offers three tracks in the undergraduate major in nursing: **Track One** is for the student who is seeking initial baccalaureate education in the nursing profession **Track Two** is for the student who has obtained licensure as a registered nurse who has graduated from an Associate Degree or Diploma accredited program and is pursuing a baccalaureate degree. Track Three is for the student who has obtained licensure as a licensed practical nurse and graduated from an accredited LPN program and is pursuing a baccalaureate degree.

Mission Statement

The mission of the Dr. Lillian R. Goodman Department of Nursing is in keeping with the Worcester State University mission with the emphasis on developing the professional nurse who values lifelong intellectual growth and global awareness. The Department of Nursing fosters the professional growth of faculty and students through excellence in teaching and learning, rooted in scholarship and community service related to the discipline of nursing.

Undergraduate Program Outcomes

The Department of Nursing prepares individuals for the roles and responsibilities of professional nursing through an undergraduate program leading to the Bachelor of Science degree.

The program outcomes of the undergraduate program are as follows:

1. Provide comprehensive, holistic care that is grounded in the biological sciences, the arts, and humanities.
2. Demonstrate an understanding of a variety of organizational structures, missions, visions, philosophies, and values.
3. Utilize current theoretical, scientific, and research knowledge toward evidence based professional practice.
4. Demonstrate competence in utilizing information technology resources to advance professional practice
5. Comply with the Standards of Professional Nursing Practice.
6. Implement effective inter-professional communication when working with the health care team.
7. Implement evidence based practice to guide the nursing process toward culturally sensitive, individual, and population focused care.
8. Apply the professional standards of moral, ethical, and legal conduct to practice.
9. Demonstrate clinical competency, accountability, and ethical decision making as an entry level, novice professional nurse.

The nursing department has department-specific policies which are found in the Department of Nursing Undergraduate and Graduate Student Policy Handbooks. These policies include, but are not limited to, the following: progression and retention, classroom and clinical behavior, academic honesty, professional behavior, and CORI/drug screening/ health requirements. The department reserves the right to modify policies and the curriculum during the students' enrollment. Sufficient notice of any change will be provided to students.

Progression in the program requires successful grade of C or above and completion of all pre and corequisite courses. A grade of 80 or above, is required in all nursing (NU) courses and all clinical placement require a grade of "passing" (P).

Good Moral Character Required for Licensure

In compliance with policy of the Massachusetts State Board of Nursing, all applicants/students are informed that completion of the BS degree does not guarantee admittance to the registered nurse licensure examination. According to Board Licensure Policy 00-01, any individual convicted of a felony or misdemeanor conviction, and/or who has been disciplined by a licensure/certification body must be evaluated by the Board to determine a licensure applicant's compliance with the "good moral character" licensure requirement established at Massachusetts General Laws, Chapter 112, section 74 and 74A. Any individual who has been convicted of a felony or misdemeanor conviction, and/or who has been disciplined by a licensure/certification body, or whose ability to practice professional nursing is adversely affected by a physical or mental disability/ illness that may endanger the health and/or safety of a person, should seek special advising prior to enrolling in any professional nursing program in Massachusetts. Individuals convicted of certain criminal convictions are permanently excluded from nurse licensure in Massachusetts.

All students in the nursing program will be required to have periodic CORI (Criminal Offender Record Information) checks requested by the department and/or clinical agencies. This background check is a computerized search to determine if an individual has any convictions, outstanding warrants or pending complaints. The information from these records is confidential and is destroyed when a student graduates. **Progression and mandatory clinical placements in the nursing program are contingent on a "no report" CORI check result**. Clinical agencies may independently perform CORI checks on students and do not have to accept a student with a CORI report indicating that an offense exists. The department is not responsible for alternate clinical placements for students who cannot be placed in an agency related to a CORI offense report. Students have an obligation to inform the department chair if any legal issues arise, while in the program, that are reportable on a CORI. For more information please see www.mass.gov/eohhs/gov/departments/dph/programs/hcq/dhpl/nursing/licensing/good-moral-character-requirements-for-licensure.html

Health Care Agency Requirements: Health, Drug Screening and Other

Nursing students will be placed in a variety of health care settings. Each agency has requirements which the student must fulfill before they are allowed placement. This list may include, but is not limited to, the following; physical exam, immunizations, agency specific orientation, CORI, SORI, and drug screening. Progression and mandatory clinical placements in the nursing program are contingent on meeting all agency requirements. If a student is denied placement by the agency for any reason, including a positive drug or CORI report, the nursing department is not responsible for providing alternate clinical placements.

Clinical Course Requirements for ALL Nursing Tracks:

All newly admitted students will be required to participate in an online documentation tracking system, Verified Credentials, and provide the documentation listed below. Students are required to maintain compliance (updated documentation) for the entirety of the program. Information for accessing Verified Credentials will be provided by the clinical resource coordinator. Requirements (below) must be electronically submitted include:

1. Current, unencumbered license to practice as a Registered Nurse in the Commonwealth of MA.
2. **CPR:** American Heart Association BLS for Health Care Provider or the American Red Cross CPR for the Professional Rescuer are the only accepted certifications
3. **Health Information Disclosure Form**
4. **Proof of Health Insurance**
5. **Physical Exam**: Form available via Verified Credentials
6. **Hepatitis B Immunization Series & positive titer**
7. **MMR (Measles, Mumps and Rubella)** Documentation of 2 doses or positive titers for each

8. Varicella (documentation of 2 doses or positive titer, history of disease is not accepted

9. Tuberculosis

   A. All students with no past history of a positive Tuberculosis (TB) screening test must provide documentation of annual TB screening. Any student with a TB screening that is greater than 12 months old must provide baseline TB screening through IRGA (Interferon Gamma Release Assay) or a 2 -step TST (tuberculin Skin Test)

   B. Students who have been vaccinated with BCG (Bacillus Calmette-Guerin) and are accustomed to obtaining chest x-rays are required to have a baseline TB screening. BCG is no longer considered to be a protective measure against TB or a contradiction to TB screening. Should the result be positive, a chest x-ray and a doctor's note is required to rule out active disease

10. Tdap (Tetanus/Diphtheria/Pertussis) vaccine, if it has been 5 years or more since the last dose of Td

11. Flu Vaccine for current flu season or signed declaration (medical exclusion only)

Please note that Clinical facilities may stipulate additional requirements for which documentation must be provided. Also, many other of these requirements needed to be updated annually or biannually. It is students' responsibility to submit updated records.

1. Criminal Offender Record Investigation (CORI) is required for all students

2. Sexual Offender Record Investigation (SORI) and/or drug screening may be required by health care agencies

3. Professional liability insurance is renewed annually provided by Worcester State University

Student Organizations

National Student Nurses' Association

This student led organization is actively involved in outreach leadership development. Membership is mandatory for matriculated students in Track I and Track III programs.

Sigma Theta Tau International: Iota Phi Chapter-at-Large

The International Honor Society for Nurses provides leadership and scholarship in practice, education, and research to enhance the health of all people. Students are selected for membership into the local chapter of the Iota Phi Chapter-at-Large based on academic and personal criteria.

IHI Open School

The mission of the IHI Open Schools to advance health care improvement and patient safety competencies in the next generation of health professionals worldwide. The IHI Open House School provides inter-professional opportunities for students of medicine, nursing, public health, pharmacy, health administration, dentistry, and other allied health professions with the opportunity to learn about quality improvement and patient safety. IHI is a leading innovator in health and health care improvement worldwide.

Requirements for Graduation

For the Bachelor of Science Degree with a major in Nursing students must complete:

- A minimum of 120 credits
- Each nursing course (and each component) with a minimum grade of 80 and clinical Pass
- All Nursing Department and Worcester State University requirements
- "Intent to Graduate" form

Transfer credits are determined by the transfer admission department upon receipt of the student's official transcripts.

Students enter as Freshmen (year 1)

- Must complete all courses listed in Year One in order to move to Sophomore level.

Nursing courses must be taken in sequence, but LASC courses can be taken at any time after freshmen year (unless otherwise specified).

- All nursing courses must have a minimum grade of 80 (B-)
- All prerequisites have a minimum grade C (see below)

The following courses must have a minimum grade requirement of C:

- Human Anatomy & Physiology I and II with lab
- Survey of Chemistry with lab
- Medical Microbiology with lab
- English Composition I and II
- General Psychology
- Statistics I & QR Elective
- Health and Nutrition
- Intro to Sociology

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor during the fall and spring preregistration periods to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation. To receive a baccalaureate degree from Worcester State University (WSU), students must complete 30 of last 40 credits at WSU. Worcester State University will transfer a maximum of 72 credits from an accredited associates degree college.

- Fast-Track Program (RN-to-MS) (p. 236)
- Track One (RN Undergraduate) (p. 236)
- Track Three (LPN-to-BS Program) (p. 240)
- Track Two (RN-to-BS Program) (p. 238)

Faculty

Susan Alix, Department Chair, Associate Professor (2006), R.N. St. Vincent Hospital School of Nursing; B.S. Worcester State College; M.S. University of Massachusetts, Worcester; D.N.P. Samford University

Paula Bylaska-Davies, Associate Professor (2016), A.S., Quincy Junior College; B.S., University of Massachusetts Amherst; M.S., State University of New York at Binghamton; Ph.D., University of Massachusetts Worcester

William Chadbourne, Instructor (2015), A.S. Mount Wachusett Community College; B.S. Worcester State College; M.S. Worcester State University

Stephanie Chalupka, Professor (2008), A.S. Quinsigamond Community College; B.S. Worcester State College; M.S. Boston College; Ed.D. University of Massachusetts Amherst

Amanda Cornine, Instructor (2016), A.S.N., Central Maine Medical Center School of Nursing; B.F.A., University of Maine at Farmington; B.S.N., University of Massachusetts Boston; M.S.N., Framingham State University

Melissa D. Duprey, Associate Professor (2014), A.S.N. Manatee Community College; B.S.N.University of South Florida; M.S.N. University of Alabama; Ed.D. Walden University

Barbara Ann Giguere, Professor (1980), R.N. Worcester City Hospital School of Nursing; B.S. Worcester State College; M.S. University of Connecticut; Ed.D. University of Massachusetts Amherst

Cheryl Hersperger, Assistant Professor (2014), R.N. Worcester City Hospital; B.S. Framingham State College; M.S. Worcester State College

Theresa M. Khoury, Assistant Professor (2017), A.S., Bunker Hill Community College; A.S., Laboure College; B.S., Curry College; M.S.N., Framingham State College; D.N.P., Regis College

Angela M. Latter, Instructor (2017), B.S., M.S., Worcester State University

Robyn Leo, Associate Professor (1995), R.N. Framingham Union Hospital School of Nursing; B.S. Worcester State College; M.S. University of Connecticut

Michelle Page, Instructor (2014), B.S.N Hawaii Pacific University; M.S.N. Framingham State University

Kimberly Silver-Dunker, Assistant Professor (2016), A.S.,B.S. Atlantic Union College; M.S., DNP Regis College

Janna Trombley, Instructor (2016), B.S.N. University of Vermont; M.S., Worcester State University

Judy Tuori, Instructor (2012), B.S. D'Youville College; M.S. Anna Maria College; M.S. University of Massachusetts Lowell

NU-193 Special Topics in Nursing for First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

NU-200 Introduction to Professional Nursing I
Prerequisites: BI-161, BI-162, BI-206, CH-112, EN-101, EN-102
Prerequisites or Corequisite: NU-206 and HE-120.
Nursing is introduced as an art and science focusing on critical thinking and decision making. clinical occurs in on-campus labs and long-term care facilities.
Every year. 5 Credits

NU-203 Transition from LPN to Professional Nursing
Prerequisites: BI-161 BI-162 CH-112 EN-101 EN-102.
Prerequisites or Corequisite: BI-206 MA-150 PS-101
This course focuses on the transitions from the Licesnsed Practical Nurse to the Baccalaureate prepared Registered Nurse.
1 Credit

NU-206 Principles of Pathophysiology and Pharmocology I
Prerequisites: BI-161 and BI-162 and CH-112 and BI-206 and EN-102
Corequisites: NU-200 and HE-120
This course is a two semester continuation course which combines assessment of the human conditions which result in pathophysiology. The pharmacological therapies are integrated into the content.
Every year. 3 Credits

NU-210 Introduction to Professional Nursing II
Prerequisites: NU-200 NU-206 SO-100 PS-101
Corequisites: NU-216
Health of individuals and families is assessed. Communication, physicl assessment, nursing process and other skills for professional practice are introduced. Medication calculations continue and the administration of medication is introduced. Lecture, an on-campus laboratory on physical assessment and off-campus clinical experiences in sub-acute care agencies are included in this course.
Spring only and every year. 5 Credits

NU-213 Health Assessment for the LPN
Prerequisites: NU-203, NU-206.
Prerequisites or Corequisite: NU-216, HE-120
The LPN student will develop an increased knowledge base and skills related to performing a complete health assessment including a physical exam on the adult patient.
Fall only and every year. 2 Credits

NU-216 Principles of Pathophysiology and Pharmacology II
Prerequisites: NU-200 PS-101 SO-100 NU-206
Corequisites: NU 210 must be completed as a co-requisite.
The focus of this course is on the study of relationships of pathophysiology to pharmacotherapy. Students examine health problems across the lifespan which result in alterations in human functioning. The therapeutic pharmacological interventions which promote the reparative process are integrated into the content
Spring only and every year. 3 Credits

NU-310 Nursing Science I
Prerequisites: NU-210 NU-216 MA-150 BI-206.
Prerequisites or Corequisite: NU-430 as required corequisite
Students will apply the nursing process when caring for the childbearing family and adult medical-surgical patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of adult medical-surgical patients and the child-bearing family. Lecture and off-campus clinical experiences in maternal-child health nursing and medical-surgical nursing are included in this course.
Every year. 9 Credits

NU-311 Nursing Science I
Prerequisites: NU-203 and NU-216
Prerequisites or Corequisite: NU-430
Concepts of wellness, disease and health behaviors will be examined in the adult medical-surgical patients and the childbearing family. Track III only.
Fall only and every year. 7 Credits

NU-315 Group Communication Seminar I
Prerequisites: NU-310 NU-430
Prerequisites or Corequisite: NU-340
The focus of this course is on effectively assessing, analyzing and problem solving the processes of group interactions with peers in the classroom in order to integrate this information into various health care settings.
Spring only and every year. 1 Credit

NU-332 Transition to Professional Nursing
LASC Categories: WAC
Prerequisites: EN-102 BI-161 BI-162 PS-101 SO-100 BI-206 MA-150.
Prerequisites or Corequisite: NU-333 and NU-334
This course focuses on nursing knowledge and theory as foundations of professional nursing. The elements of the Department of Nursing's conceptual nursing practice model are analyzed and examined in terms of nursing, diagnostic, and teaching-learning processes. Legal, ethical and environmental factors are studied in relation to their impact on person/environment unity. The format is a hybrid or blended format. Track II only.
Fall only and every year. 3 Credits

NU-333 Health Informatics
LASC Categories: QR
Prerequisites: MA-150 BI-161 BI-162 EN-101 EN-102 PS-101 SO-100 BI-20
Prerequisites or Corequisite: NU-332 and NU-334
Nursing Informatics combines knowledge and skills from nursing science, computer science, information science and cognitive science to design and implement automated systems that support the nursing process in the delivery of healthcare services. Students will explore their own role as nurses in implementing patient-centered care in an environment of advancing technology. Students will critically evaluate health information systems and their role in patient safety, safe medication administration, maintenance of patient privacy, data security, and efficacy of health care processes. Meets online. Track II only.
Fall only and every year. 3 Credits

NU-334 Selected Mechanisms of Disease and Related Pharmocology
Prerequisites: MA-150 BI-161 BI-162 EN-101 EN-102 PS-101 SO-100 BI-206.
The focus of this course is on the study of the interrelatedness of pathophysiology and pharmacodynamics. This nursing focus examines health problems across the lifespan which produce alterations in human functioning and the subsequent response, along with the pharmacological management of these problems. Interventions focus on the reparative process. Meets in a blended/hybrid format. Track II only.
Every year. 3 Credits

NU-340 Nursing Science II
LASC Categories: DAC, WAC
Prerequisites: NU-310 NU-430 EN-102
Prerequisites or Corequisite: NU-315
Concepts of wellness, disease, and health behavior are examined as the nursing process is operationalized in the care of pediatric patients and acutely ill medical-surgical patients. Lecture and an off-site clinical experience are included in this course.
Spring only and every year. 9 Credits

NU-342 Health Assessment
Prerequisites: NU-332 and NU-333 and NU-334
Corequisites: NU-430 and NU-432
The nursing process is used as the organizing framework to identify person/environment unity of individuals. A variety of skills and theories relevant to professional nursing practice are utilized. The student will develop an increased knowledge base and skills related to performing a complete physical examination of the adult and pediatric client. The format is a weekly three-hour lab/lecture on campus. Track II only.
Spring only and every year. 4 Credits

NU-344 Nursing Science II
LASC Categories: DAC
Prerequisites: NU-311 and NU-430
Concepts of wellness, disease, and health behaviors are examined as the nursing process is operationalized in the care of pediatric patients and acutely ill medical-surgical patients. Lecture and an off-campus clinical experience are included in this course. Track III only.
Spring only and every year. 7 Credits

NU-357 Global Perspectives in Health
LASC Categories: GP, ICW
Interactive course preparing students for global service immersion experience in partnership with host country.
Other or on demand and other or on demand. 3 Credits

NU-408 Directed Study: Nursing
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

NU-415 Group Communication Seminar II
Prerequisites: NU-315 and NU-430
Prerequisites or Corequisite: NU-440
The independent and interdependent role of the professional nurse as an agent of change is examined.
Fall only and every year. 1 Credit

NU-430 Research Seminar in Nursing
LASC Categories: QAC
Prerequisites: MA-150
Prerequisites or Corequisite: NU-310
The focus is on the development of the student as a consumer of nursing research and the utilization of research findings in practice.
Fall only and every year. 3 Credits

NU-432 Advanced Nursing Perspectives in Chronic Illness
LASC Categories: DAC
The focus of this course is on the study and practice of nursing directed at health promotion/prevention/restoration of clients with chronic person/environment disunity. The format is a hybrid course. Track II only.
Fall only and every year. 3 Credits

NU-440 Nursing Science III
Prerequisites: NU-315 NU-340
Prerequisites or Corequisite: NU-415
Students practice professional nursing with acutely ill adults in mental health care settings and identify multiple aspects of community and public health issues. critical thinking and decision making skills are developed and applied. lecture and off-campus clinical experiences are included in this course.
Fall only and every year. 8 Credits

NU-450 Leadership in Nursing
LASC Categories: WAC
Prerequisites: NU-415 NU-440
Corequisites: NU-460 NU-470 as a required corequisite
This course focuses on theories of leadership, management, delegation and supervision, which supports the knowledge skills and values integrated by the nurse into professional leadership behavior. Current trends in nursing and in research relating to nursing leadership and management are explored.
Spring only and every year. 3 Credits

NU-452 Professional Nursing Leadership and Organization
Prerequisites: NU-342 and NU-430 and NU-432
Prerequisites or Corequisite: NU-472 and NU-473
Hybrid Format. Track II only.
Fall only and every year. 3 Credits

NU-460 Nursing Science IV
Prerequisites: NU-415 NU-440
Corequisites: NU-450 NU-470 as required corequisite
The focus is on theories of leadership management, change, and communication which support development of professional nursing. Complex health problems are studied in classrooms and clinical settings.
Spring only and every year. 3 Credits

NU-470 Nursing: Capstone
LASC Categories: CAP
Prerequisites: NU-415 NU-440
Corequisites: NU-450 NU-460
This 7 credit course focuses on EB Practice in which students will demonstrate the integration and synthesis of all previous learning in the nursing major. Complex health problems will be studied in the clinical setting. Preceptorship opportunities are available to eligible students.
Spring only and every year. 7 Credits

NU-472 Community Nursing Capstone Course
LASC Categories: CAP
Prerequisites: NU-342 and NU-430 and NU-432
Prerequisites or Corequisite: NU-452 and NU-473
The focus of this course is on the study and practice of community-oriented nursing. Theories and environmental factors which influence the health of communities are analyzed. The format is a four-hour lecture/seminar. Hybrid format. Track II only.
Fall only and every year. 6 Credits

NU-473 Health Policy
Prerequisites: NU-342 and NU-430 and NU-432
Corequisites: NU-452 and NU-472
This course introduces the basic framework for health policy with focus on research, review and analysis of the major components of the US health policies in health care. Online/blended format. Track II only.
Fall only and every year. 3 Credits

NU-480 Independent Study in Nursing
Opportunities for students to engage in special studies in nursing according to individual interests and faculty availability.
Fall and Spring and every year. 1-6 Credits

Fast-Track Program (RN-to-MS)

The RN-to-MS Fast Track Program allows 6 graduate credits (500 Level) to be taken during the program to count toward both the Bachelor of Science and the Master of Science in Nursing degrees. This may be done when the RN meets the criteria for the Fast-Track program, and completes an application for admission to the RN-to-MS Fast-Track Program. The RN-to-MS Fast-Track application process for the Worcester State On Campus program must be completed in the fall semester of the RN-to-BS studies. (to the Graduate Nursing Program through the Graduate School). Students in the WSU/UMMMC collaborative RN-to-BS program: application must be submitted in the spring semester of your first year of studies.

Fast-track students must take courses in the M.S. program the semester after completing the B.S. degree. Otherwise 500 Level courses taken in the senior year will count only towards the RN-to-BS degree unless they are in excess of the credits required for the B.S. degree. All undergraduate degree requirements must be completed before students are permitted to take MS level courses beyond NU-525 and NU-551. Only course grades of B- or above will be counted towards the MS degree.

Track One (RN Undergraduate)

Track One Courses

Prerequisite courses to be successfully completed with a C or above by the end of Spring (May 30th) semester first-year:

BI-161 & BI-162	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
CH-112	Survey of Chemistry	4
EN-101 & EN-102	English Composition I and English Composition II	6
BI-206	Medical Microbiology	4

Corequisite courses to be successfully completed with a C or above by the end of Fall (December 31st) semester sophomore year:

PS-101	General Psychology	3
SO-100	Introduction to Sociology	3

Corequisite courses to be successfully completed with a C or above by the end of Spring (May 30th) semester sophomore year:

HE-120	Health and Nutrition	3
MA-150	Statistics I	3
QR Elective		3

Students must achieve a grade of a C or better in each of these prerequisite and co-requisite courses. Each course may be repeated only ONCE to obtain minimum required grade. A student who does not meet the minimum grade requirement will not be considered for transfer acceptance into or allowed continued progression in the nursing program.

A student who fails to complete any prerequisite and/or corequisite course on time will remain as a nursing major; however, progression in the nursing program will depend on satisfactory completion of these courses and **space availability**.

Required Nursing Courses: 60 credits – All Nursing courses must be taken in sequence.

NU-200	Introduction to Professional Nursing I	5
NU-206	Principles of Pathophysiology and Pharmocology I	3
NU-210	Introduction to Professional Nursing II	5
NU-216	Principles of Pathophysiology and Pharmacology II	3
NU-310	Nursing Science I	9
NU-430	Research Seminar in Nursing	3
NU-315	Group Communication Seminar I	1
NU-340	Nursing Science II	9
NU-415	Group Communication Seminar II	1
NU-440	Nursing Science III	8
NU-450	Leadership in Nursing	3
NU-460	Nursing Science IV	3
NU-470	Nursing: Capstone	7
Total Credits		60

Students must achieve a minimum grade of 80 in each nursing course and each section of the course when a course has two distinct class/clinical components (NU-310, NU-340, NU-440). The Department of Nursing has additional policies and procedures which are binding for nursing majors. Included in these policies are standards for progression in the nursing major. They are found in the Nursing Department's Student Handbook that all students receive a copy of the handbook at the start of the academic year and sign a note of receipt.

Nursing courses, prerequisite and corequisite courses may not be taken pass/fail and must meet the grade listed above in order to progress in program.

Transfer Students

Students taking general education courses in another college or university are required to contact the Worcester State University Admissions Office regarding matriculation and transfer of credits. Transfer students are accepted to the nursing major on a very limited space available only basis. Students are admitted into the freshmen or sophomore class level based on required course completion grades and space availability.

All transfer student applicants for Track One who have previously been enrolled in a nursing program in another college/university must submit, as part of their application, a letter from the dean or director of the nursing program indicating that they left in good standing and were eligible for readmission to that program.

Transfer students may only apply two (2) times for admission into the nursing major.

Dr. Lillian R. Goodman Department of Nursing Sample Timeline for Track I

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I [1]	3
BI-161	Human Anatomy and Physiology I	4
CH-112	Survey of Chemistry (NSP)	4
FYS	First-Year Seminar (p. 53)	3.
	Credits	14
Semester Two		
EN-102	English Composition II [1]	3
BI-162	Human Anatomy and Physiology II (NSP)	4
BI-206	Medical Microbiology (NSP)	4
SO-100 or PS-101	Introduction to Sociology (HBS) or General Psychology	3
LASC Elective (Constitution)		3
	Credits	17
Year Two		
Semester Three		
NU-200	Introduction to Professional Nursing I	5
NU-206	Principles of Pathophysiology and Pharmocology I	3
HE-120	Health and Nutrition (ICW)	3
Elective		2

SO-100 or PS-101	Introduction to Sociology (HBS) or General Psychology	3
	Credits	16
Semester Four		
NU-210	Introduction to Professional Nursing II	5
NU-216	Principles of Pathophysiology and Pharmacology II	3
MA-150	Statistics I (QR) [3]	3
LASC Elective (QR) (p. 61)		3
	Credits	14
Year Three		
Semester Five		
NU-310	Nursing Science I	9
NU-430	Research Seminar in Nursing (QRAC)	3
LASC Elective [4]		3
	Credits	15
Semester Six		
NU-340	Nursing Science II (DAC)	9
NU-315	Group Communication Seminar I	1
LASC Elective [4]		3
LASC Elective [4]		3
	Credits	16
Year Four		
Semester Seven		
NU-440	Nursing Science III	8
NU-415	Group Communication Seminar II	1
LASC Arts Elective [5]		3
Free Elective [5]		3
	Credits	15
Semester Eight		
NU-460	Nursing Science IV	3
NU-450	Leadership in Nursing	3
NU-470	Nursing: Capstone	7
	Credits	13
	Total Credits	120

1 EN-101 & EN-102 satisfies LASC writing.

2 Pick 2 credit elective of your choice semester 3

3 MA-150 required Accuplacer score of 4 or higher

4 Junior Year Pick one (3 credit) course in: GP, TLC, USW

5 Senior Year Fall needs: 1 Creative Arts & Need one 3 credit Free Elective.
All LASC Electives should be complete by end of semester 7.

All Sciences and pre-requisites must be completed by May 30th with a grade of C or better to progress to Sophomore Year.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Track Two (RN-to-BS Program)

Admission Process

All students applying to the RN-BS program must hold a current unencumbered license to practice as an RN in the Commonwealth of Massachusetts. The RN-BS student applying to Worcester State University as a transfer student can receive up to 72 credits transferrable from an accredited associate degree college and a maximum of 90 credits from four year colleges and universities. Students with a BA or BS degree in another major only need to complete the nursing courses and the pre-requisite courses for the nursing major. Admission requirements include official high school and college transcripts and a minimum 2.5 GPA. Associate degree graduates and diploma graduates earn 29 nursing credits for NCLEX-RN licensure.

All Track Two courses are offered in a **hybrid** format (in-class and online).

The **full-time day program** offered at **WSU** is a three semester nursing program that begins each fall semester.

The **part-time evening (after 4pm)** program offered at **UMass Memorial Medical Center** is a 4 semester nursing program that begins each fall.

All applicants must complete the required components of the admission process prior to April 1st for consideration of admittance for that September. Students who wish to matriculate into the program and begin taking prerequisites

or corequisites early, may be admitted as an early admission by completing the application process. However, students **may not enter the nursing program of courses without first having completed all pre-requisites (including statistics) with a grade of C or higher.**

Students in the **Quinsigamond Community College-Worcester State University 3+1** program will adhere to the QCC-WSU articulation agreement. Students must complete the first six semesters at QCC prior to admission to the RN to BS Track II program.

Students applying to the UMASS part-time evening program do not need to be employed by UMass Memorial Medical Center at the time classes begin. However, if the student is a UMass Memorial Healthcare employee the application fee is waived.

Track Two Prerequisite Courses

These courses may be transferred if the student has previously taken the course (per college transfer policy) or may be taken at Worcester State University. Prerequisite, corerequisite, and Nursing courses may not be taken pass/fail.

EN-101 & EN-102	English Composition I and English Composition II	6
MA-150	Statistics I [1,2]	3
SO-100	Introduction to Sociology	3
PS-101	General Psychology	3
BI-161 & BI-162	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
BI-204 & BI-206	Microbiology and Medical Microbiology	8

1. EN-101 may be waived.
2. Prerequisite for NU-430 OR NU-525.
3. A passing grade for the WSC *Accuplacer* is required by for this course.

Sample RN-BS Curriculum WSU Campus

Track Two Nursing Courses

(31 Worcester State University Nursing Credits)

All nursing courses must be taken in sequence. All courses are hybrid unless otherwise noted. Students must achieve a minimum grade of 80 in each nursing course. Only one nursing course may be repeated to obtain the minimum grade or required GPA and must be repeated within the 2 years.

Track II RN to BS WSU Full-time (Blended/Day)

Semester I		(9 credits)
NU-332	Transition to Professional Nursing	3
NU-333	Health Informatics (On-Line)	3
NU-334	Selected Mechanisms of Disease and Related Pharmocology	3
Semester II		(10 credits)
NU-342	Health Assessment	4
NU-430	Research Seminar in Nursing	3
or NU-525	Research for Evidence Based Practice	
NU-432	Advanced Nursing Perspectives in Chronic Illness	3
Semester III		(12 credits)
NU-452	Professional Nursing Leadership and Organization	3
or NU-551	Nursing Leadership and Administration	
NU-472	Community Nursing Capstone Course	6
NU-473	Health Policy (On-Line)	3
Total Credits		31

Sample RN-to-BS Curriculum UMass Memorial Medical Center (Part Time Evening)

Course	Title	Credits
Year One		
Semester One		
NU-332	Transition to Professional Nursing	3
NU-333	Health Informatics (On-Line)	3
	Credits	6
Semester Two		
NU-334	Selected Mechanisms of Disease and Related Pharmocology	3

NU-430	Research Seminar in Nursing	3
	Credits	6
Summer I		
NU-342	Health Assessment	4
	Credits	4
Summer II		
NU-473	Health PolicyCan take Fall Year 2 (On-Line)	3
	Credits	3
Year Two		
Semester Three		
NU-452	Professional Nursing Leadership and Organization	3
NU-432	Advanced Nursing Perspectives in Chronic Illness	3
	Credits	6
Semester Four		
NU-472	Community Nursing Capstone Course This includes 32 hours (4 days) of clinical experience	6
	Credits	6
	Total Credits	31

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Track Three (LPN-to-BS Program)

This program is designed for those students who have graduated from an accredited Licensed Practical Nursing Program with an unencumbered LPN license.

Degree Overview

The LPN to BS in Nursing Track III Program is designed to transition the Licensed Practical Nurse (LPN) to the role of the baccalaureate prepared Registered Nurse. Graduates of this program are prepared to meet societal healthcare needs in a variety of settings. Respect for diversity and social responsibility as well as a commitment to excellence in nursing care are emphasized.

Admissions Criteria

Final deadline for application is February 1, 2018

- Students accepted for Fall of each year
- Current unencumbered LPN License
- Graduate from an accredited LPN Program with Cumulative Grade Point Average (GPA) > 2.5
- Successful completion of the Nursing Acceleration Challenge Exams (NACE I, PN-RN)

Test Name	Minimum Score Required
Foundations of Nursing	72
Nursing Care of the Child	62
Nursing Care for the Childbearing Family	62

Registration and test dates can be found at https://ondemand.questionmark.com/400030/ext/nlntesting/.

Official transfer credit evaluations are conducted by the Registrar after admission to the University

Sample Timeline for Track Three (LPN-to-BS Program)

Pre-Requisites		(41 credits)
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
CH-112	Survey of Chemistry	4
EN-101	English Composition I	3
EN-102	English Composition II	3
MA-150	Statistics I	3
PS-101	General Psychology	3
NLN NACE Entrance Exam		13

Course	Title	Credits
Year One		
Semester One		
NU-206	Principles of Pathophysiology and Pharmocology I	3
NU-203	Transition from LPN to Professional Nursing	1
SO-100	Introduction to Sociology	3

LASC	LASC Elective (CON) (p. 49)	
	Credits	7
Semester Two		
NU-216	Principles of Pathophysiology and Pharmacology II	3
NU-213	Health Assessment for the LPN	2
HE-120	Health and Nutrition	3
LASC	LASC Elective (GP) (p. 54)	
	Credits	8
Year Two		
Semester Three		
NU-311	Nursing Science I	7
NU-430	Research Seminar in Nursing	3
LASC	LASC Elective (USW) (p. 61)	
SELECT	Elective	
	Credits	10
Semester Four		
NU-344	Nursing Science II	7
LASC:	LASC Elective (QR) (p. 61)	
LASC	LASC Elective (CA) (p. 50)	
SELECT	Elective (if needed)	
	Credits	7
Year Three		
Semester Five		
NU-440	Nursing Science III	8
SELECT	Elective (if needed)	
LASC	LASC Elective (TLC) (p. 63)	
	Credits	8
Semester Six		
NU-460	Nursing Science IV	3
NU-450	Leadership in Nursing	3
NU-470	Nursing: Capstone	7
	Credits	13
	Total Credits	53

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Occupational Studies

Department of Occupational Therapy

The Bachelor of Science in Occupational Studies program offers a stimulating and challenging curriculum that blends professional coursework with a traditional liberal arts education. Students begin by learning the philosophy and founding principles of occupational therapy along with acquiring a thorough understanding of biological, psychological, and social aspects of human beings. In upper division coursework, students learn to apply this knowledge and to develop occupational therapy clinical reasoning skills for evaluation of and intervention with persons across the lifespan. Between the junior and senior years, students with good academic standing are eligible to apply for admittance to the Master of Occupational Therapy Program. Acceptance and completion of the undergraduate program in occupational studies does not guarantee admission into the Master of Occupational Therapy Program. Only graduates of the Master of Occupational Therapy Program are eligible to sit for the national examination administered by the National Board for Certification in Occupational Therapy.

A passing score on this examination allows the graduate to apply for a license to practice that is required by most states within the United States, including Massachusetts. For further information regarding certification contact: NBCOT; 800 Frederick Avenue, Suite 200, Gaithersburg, Maryland, 20877-4150; (301) 990-7979; www.nbcot.org.

The combined Bachelor of Science in Occupational Studies and Master of Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education. For further information regarding accreditation contact: ACOTE; 4720 Montgomery Lane, Suite 200, Bethesda, Maryland, 20814-3449; (301) 652-2682; www.acoteonline.org.

Program Application Process

Application to enter the BSOS Program as a first-year student is made through the Admissions Office at the time of application to Worcester State University. Students are encouraged to apply early due to limited enrollment.

First-year students are admitted on the basis of SAT scores, high school rank, and coursework relevant to the major.

Any individual who has been convicted of a felony or misdemeanor involving an act likely to affect professional practice should meet with the Department Chair prior to applying to the program. Prior incidents may affect eligibility for fieldwork, certification, and employment. A CORI check and/or drug test is typically required prior to Fieldwork Level I and Level II placement.

Policies

- All undergraduate occupational therapy prerequisite and major courses must be completed with a grade of C or better.
- Courses must be taken in the prescribed sequence unless an exception is granted by the Department Chair.
- All undergraduate and graduate level coursework must be successfully completed before beginning Level II Fieldwork.
- The second Level II Fieldwork experience must be completed within 12 months of academic coursework.
- Eligibility to sit for the national certification examination requires successful completion of six-months of Level II Fieldwork.
- The Occupational Therapy Department has a student handbook that is updated yearly and contains department-specific policies. Each student is responsible for adhering to the polices. The Department reserves the right to modify policies and curriculum during a student's enrollment. Sufficient notice of any changes will be provided to the students.

- Bachelor of Science Occupational Studies Program (p. 245)

Faculty

Tanya Biello, Instructor (2015), B.A., Eastern Connecticut State University; M.O.T., Worcester State University

Patricia A. Donovan, Department Chair, Associate Professor (2000), B.S. Framingham State College; M.S. Boston University; Ed.D. Argosy University

Nancy Dooley, Associate Professor (2017), B.S. Quinnipiac College; M.A., Ph.D. New York University

Joanne Gallagher Worthley, Professor (1996), B.S. Quinnipiac College; M.S. Florida International University; Ed.D. Johnson & Wales University

Patricia C. George, Academic Fieldwork Coordinator (1998), B.S., M.S. Worcester State College

Cheryl B. Lucas, Assistant Professor (2015), B.S. Tufts University; M.S. Boston University; Ed.D. Johnson and Wales University

OT-101 Introduction of Occupational Studies of Wellnes/Disability
Introduction to the profession: philosophy, wellness/ illness/ disability continuum with a focus on disability; occupational performance and activity; enviornments; professionalization; and clinical reasoning.
Fall and Spring and every year. 3 Credits

OT-102 Occupational Studies of Wellness/ Disability Groups
Continuing discussion of the profession through six themes: philosophy, wellness/illness/disability continuum with a focus on wellness; normal range of occupational performance and activity; professionalization; and clinical reasoning.
Fall and Spring and every year. 3 Credits

OT-193 First Year Seminar: Occupational Therapy
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

OT-203 Occupational Therapy Theories
Continuing discussion of the profession using the six themes this course will focus on; standards of practice,interdisci- plinary relationships, certification, wellness/illness/dis- ability continuum, occupational performance and activity; occupational performance environments; professionalization; and clinical reasoning with a focus on models of practice.
Fall and Spring and every year. 3 Credits

OT-211 Kinesiology Lab
Prerequisites or Corequisite: BI-271
Lab experiences and discussions will integrate biological knowledge of movement with occupational therpy concepts of performance and function. This course will provide students with the knowledge and skills necessary to evaluate range of motion, muscle strength, and posture. Functional abilities needed in daily activities will be analyzed.
Fall and Spring and every year. 1 Credit

OT-301 Psychosocial Wellness/Disability
Prerequisites or Corequisite: OT-302 and OT-304
Themes of history of the profession,wellness/illness/ disability continuum, occupational performance and context, professionalization,and clinical reasoning will be applied to psychosocial performance in life roles.
Fall and Spring and every year. 2 Credits

OT-302 Psychosocial Therapeutic Approaches
Prerequisites or Corequisite: OT-301 and OT-304
Themes of history of the profession, wellness/illness/ dis- ability continuum, occupational performance and context, professionalization, and clinical reasoning will be applied to practice models when addressing psychosocial health, illness, and disability.
Fall and Spring and every year. 3 Credits

OT-304 Psychosocial Therapeutic Approaches Lab
Prerequisites or Corequisite: OT-301 and OT-302
Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with psychosocial disorders. Includes observation in various sites off-campus.
Fall and Spring and every year. 2 Credits

OT-312 Physiological Wellness/Disability
Prerequisites or Corequisite: OT-313 and OT-318 as co-requisites
Historical themes of the profession, wellness/illness/ disability continuum, occupation and context as it applies to physiological performance in life roles.
Spring only and every year. 2 Credits

OT-313 Physiological Therapeutic Approaches
Occupational performance and context, professionalism, and clinical reasoning will be applied to practice models when addressing physiological health and illness.
Fall and Spring and every year. 3 Credits

OT-317 Research I
Prerequisites: MA-150 or PS-275
Course will examine qualitative and quantitative research related to Occupational Therapy. The focus will be on reading and designing research.
Fall and Spring and every year. 3 Credits

OT-318 Physiological Therapeutic Approaches Lab
Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with physiological disorders. Includes Fieldwork I.
Fall and Spring and every year. 2 Credits

OT-400 Special Topics in Occupational Therapy
Selected areas of interest to students and instructor. Topic, prerequisites and instructor are announced in advance.
Other or on demand. 3 Credits

OT-401 Occupational Performance and Context for Elders
Prerequisites or Corequisite: OT-402, OT-403 and OT-404
The wellness/illness/disability continuum will be applied to occupational performance in life roles for the geriatric population.
Fall and Spring and every year. 2 Credits

OT-402 Therapeutic Approaches for Elders
Prerequisites or Corequisite: OT-401 and OT-403
Occupational therapy strategies for elders across the wellness/illness/disability continuum with emphasis on occupational performance/context and clinical reasoning.
Fall and Spring and every year. 3 Credits

OT-403 Therapeutic Apporaches Lab for Elders
Prerequisites or Corequisite: OT-401 and OT-402
Experiential learning with asessments and intervention approaches for elders. Includes Fieldwork I experience in various sites off campus.
Fall and Spring and every year. 2 Credits

OT-404 Assistive Technology I
Prerequisites or Corequisite: OT-401, OT-402 and OT-403
Assistive technology related to the needs of the geriatric population will be explored.
Fall and Spring and every year. 3 Credits

OT-407 Research II
Prerequisites: OT-317
Course will continue to examine qualitative and quantitative research related to OT. The focus will be on analyzing data and writing research reports. Standardized tests and program evaluation are also discussed.
Every year. 3 Credits

OT-411 Occupational Therapy International Service Learning Experience
Selected areas of interest to students and instruc
Other or on demand. 2 Credits

OT-421 Occupational Performance and Context for Children/Adolescents
Prerequisites or Corequisite: OT-423, OT-424 and OT-427
Themes of history of the profession, wellness/illness/dis- ability continuum, occupational performance and context, professionalization, and clinical reasoning will be applied to performance in life roles related to the pediatric population.
Fall and Spring and every year. 2 Credits

OT-423 Therapeutic Approaches Lab for Children/Adolescents
Prerequisites or Corequisite: OT-421
Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with the pediatric population. Includes observation in various sites off-campus.
Fall and Spring and every year. 2 Credits

OT-424 Assistive Technology II
Prerequisites or Corequisite: OT-421
Assistive technology related to the occupational performance and treatment in pediatric practice.
Fall and Spring and every year. 3 Credits

OT-426 Organizational and Professional Issues I
LASC Categories: CAP
Prerequisites or Corequisite: OT-421
Introduction to principles of organization, administration, and management applied to the delivery of occupational therapy services in various practice settings, work relationships, ethical issues, and laws influencing practice will also be discussed.
Fall and Spring and every year. 3 Credits

OT-427 Therapeutic Approaches for Children/ Adolescents
Themes of history of the profession, wellness/illness/ disability continuum, occupational performance and context professionalization, and clinical reasoning will be applied to practice models when addressing health, illness, and disability in the pediatric population.
Fall and Spring and every year. 3 Credits

Bachelor of Science Occupational Studies Program

Requirements for the Major

The following courses are required:

OT Prerequisite Courses for the BSOS		(27-28 credits)
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-215	Neuroscience	4
BI-271	Basic Kinesiology	3
PS-101	General Psychology	3
PS-210	Developmental Psychology	3
PS-322	Psychology of Aging	3
MA-150	Statistics I	3-4
or PS-275	Psychological Statistics	
OT Major Courses for the BSOS		(53 credits)
OT-101	Introduction of Occupational Studies of Wellnes/Disability	3
OT-102	Occupational Studies of Wellness/ Disability Groups	3
OT-203	Occupational Therapy Theories	3
OT-211	Kinesiology Lab	1
OT-301	Psychosocial Wellness/ Disability	2
OT-302	Psychosocial Therapeutic Approaches	3
OT-304	Psychosocial Therapeutic Approaches Lab	2
OT-312	Physiological Wellness/ Disability	2
OT-313	Physiological Therapeutic Approaches	3
OT-317	Research I	3
OT-318	Physiological Therapeutic Approaches Lab	2
OT-401	Occupational Performance and Context for Elders	2
OT-402	Therapeutic Approaches for Elders	3
OT-403	Therapeutic Apporaches Lab for Elders	2
OT-404	Assistive Technology I	3
OT-407	Research II	3
OT-421	Occupational Performance and Context for Children/ Adolescents	2
OT-423	Therapeutic Approaches Lab for Children/Adolescents	2
OT-424	Assistive Technology II	3
OT-426	Organizational and Professional Issues I	3
OT-427	Therapeutic Approaches for Children/Adolescents	3
Total Credits		80-81

Department of Occupational Therapy: Occupational Studies Sample Timeline for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
OT-101	Introduction of Occupational Studies of Wellnes/Disability	3
BI-161	Human Anatomy and Physiology I	4
PS-101	General Psychology (HBS) [1]	3
EN-101	English Composition I [2]	3
LASC	First-Year Seminar (FYS) (p. 53)	3
	Credits	16
Semester Two		
OT-102	Occupational Studies of Wellness/ Disability Groups	3
BI-162	Human Anatomy and Physiology II (NSP) [1]	4
EN-102	English Composition II [2]	3
LASC	LASC Elective (CON) (p. 49)	3

LASC [1]	LASC Elective (QR) (p. 61)	3
	Credits	16

Year Two

Semester Three

OT-203	Occupational Therapy Theories	3
PS-210	Developmental Psychology (HBS) [1]	3
BI-215	Neuroscience	4
MA-150 or PS-275	Statistics I (QR)[1] or Psychological Statistics	3-4
LASC [1]	LASC Elective (USW) (p. 61)	3
	Credits	16-17

Semester Four

OT-211	Kinesiology Lab	1
PS-322	Psychology of Aging	3
BI-271	Basic Kinesiology (NSP) [1]	3
LASC [1]	LASC Elective (GP) (p. 54)	3
LASC [1]	LASC Elective (WAC) (p. 66)	3
	Credits	13

Year Three

Semester Five

OT-301	Psychosocial Wellness/ Disability	2
OT-302	Psychosocial Therapeutic Approaches	3
OT-304	Psychosocial Therapeutic Approaches Lab	2
OT-317	Research I	3
LASC [1]	LASC Elective (CA) (p. 50)	3
LASC [1]	LASC Elective (TLC) (p. 63)	3
	Credits	16

Semester Six

OT-312	Physiological Wellness/ Disability	2
OT-313	Physiological Therapeutic Approaches	3
OT-318	Physiological Therapeutic Approaches Lab	2
LASC [1]	LASC Elective (ICW) (p. 58)	3
LASC [1]	LASC Elective (QLAC) (p. 60)	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
	Credits	16

Year Four

Semester Seven

OT-401	Occupational Performance and Context for Elders	2
OT-402	Therapeutic Approaches for Elders	3
OT-403	Therapeutic Apporaches Lab for Elders	2
OT-404	Assistive Technology I	3
OT-407	Research II	3
SELECT	General Elective	3
	Credits	16

Semester Eight

OT-421	Occupational Performance and Context for Children/ Adolescents	2
OT-427	Therapeutic Approaches for Children/Adolescents	3
OT-423	Therapeutic Approaches Lab for Children/Adolescents	2
OT-424	Assistive Technology II	3
OT-426	Organizational and Professional Issues I (CAP)	3
	Credits	13
	Total Credits	122-123

1 The sequence of LASC courses marked with [1] is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

2 EN-101 with EN-102 satisfies LASC Writing. By the end of Semester two term, students must have an Accuplacer score of 4 to take MA-150. Alternative in Fall 2 is PS-275.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Physical Education

Department of Health Sciences

The physical education program offers minors in Sport Coaching and Health Fitness and a wide variety of activities including basketball, dance, fitness, golf, sailing, self defense, stress management, tennis, volleyball, weight training, yoga, and individual, dual, and team sports. New enrollments in the Physical Education program are no longer accepted, effective Fall 2017.

- Health Fitness Minor (p. 247)
- Sport Coaching Minor (p. 248)

PE-100 Physical Education Activity Courses
Activities include archery, basketball, candlepin bowling, low and high impact aerobics, fitness and weight control, football, golf, racquetball, relaxation, sailing, softball, tennis, volleyball, weight training, yoga, health fitness, and ballroom dancing.
Fall and Spring and every year. 1 Credit

PE-150 Health and Physical Education for the Teacher
The planning, development, implementation and evaluation of comprehensive health education programs.
Every year. 3 Credits

PE-175 Principles of Coaching
The values, relationships, and skills necessary to coach children and young adults in competitive athletics.
Fall and Spring and every 2-3 years. 3 Credits

PE-210 Foundations of Strength and Conditioning
Prerequisites: BI-161 and HE-170 or BI-271.
An introduction to the principles of functional training that meet sport specific needs of athletes.
Every year. 3 Credits

PE-220 Survey of Athletic Training
Prerequisites: BI-161 and He-170 or BI-271
General overview of athletic training with a clinical approach to prevention, evaluation, and rehabilitation of injuries common to athletes.
Every 2-3 years. 3 Credits

PE-225 Fundamentals of Athletic Training
The prevention and treatment of all types of athletic injuries. Anatomy, injury recognition, physiology, and taping are included.
Spring only and every 2-3 years. 3 Credits

PE-260 First Aid: Advanced Theory and Skill
Common emergencies, cardiopulmonary resuscitation, auto extraction, and emergency childbirth. Opportunity for instructor rating. [Cross listed as HE260.]
Fall and Spring and other or on demand. 3 Credits

PE-275 Fitness for Life
Prerequisites: HE-120
Knowledge of health-related fitness components and their effect on total wellness; emphasis on developing personalized fitness program, namely cardiovascular endurance. [Cross listed as HE275.]
Fall and Spring and every year. 3 Credits

PE-280 Individual Stress Management and Relaxation
Strategies and techniques for increasing stress resistance based on psychophysiological research.
Fall and Spring and every year. 3 Credits

PE-420 Practicum in Health Fitness
Opportunity to gain practical experience under supervision in a health fitness field placement.
Spring only and every year. 3 Credits

Health Fitness Minor

The minor encompasses both the knowledge and skills required in the growing field of Health Fitness. Applications focus on improving health and fitness at both the individual and population levels. New enrollments in the Health Fitness Minor are no longer accepted, effective Fall 2017.

Requirements for the Health Fitness Minor

Required Courses		(9 credits)
HE-120	Health and Nutrition	3
PE-210	Foundations of Strength and Conditioning [1]	3
PE-220	Survey of Athletic Training [1]	3
Elective Courses		(9 credits)
Select three of the following:		9
PE/HE-150	Health and Physical Education for the Teacher	
SO-190	Sport and Society	
PE/HE-260	First Aid: Advanced Theory and Skill	
PE/HE-275	Fitness for Life	

PE/HE-280	Individual Stress Management and Relaxation	
HE-285	Drugs and Society	
PE-420	Practicum in Health Fitness	
Total Credits		18

[1] Prerequisites: BI-161 **and** either HE-170 **or** BI-271.

A minimum grade of 2.0 must be earned in required and elective courses. Prerequisites must average a minimum of 2.0.

Sport Coaching Minor

Coaches have an exceptional opportunity to exert a strong positive influence on players and to that end the minor adheres to the National Association for Sport and Physical Education (NASPE) coaching standards that emphasize ethics, safety, team play and leadership. Courses also address the need for coaches to produce the safest environment for players and others and to avoid litigation by adhering to the objectives of the National Federation of State High School Associations (NFHS). New enrollments in the Sports Coaching Minor are no longer accepted, effective Fall 2017.

Requirements for the Sport Coaching Minor

Required Courses		(6 credits)
PE-175	Principles of Coaching	3
PE-220	Survey of Athletic Training [1]	3
Elective Courses		(12 credits)
Select four of the following:		12
HC-228	Health Ethics	
HE-120	Health and Nutrition [1]	
HE-285	Drugs and Society [1]	
SO-190	Sport and Society	
PE-210	Foundations of Strength and Conditioning	
PE/HE-260	First Aid: Advanced Theory and Skill	
PE-420	Practicum in Health Fitness	
Total Credits		18

[1] Prerequisites: BI-162 **and** either HE-170 **or** BI-271.

A minimum grade of 2.0 must be earned in required and elective courses. Prerequisites must average a minimum of 2.0.

Physics

Department of Earth, Environment and Physics

A physics minor is useful in many technical fields because the study of physics develops an understanding of basic principles, mathematical modeling, and practical applications. Specific areas where a physics background is useful include imaging techniques in medicine and biology, analytical instrumentation in chemistry, remote-sensing techniques in the geosciences, and development of realistic physical models in computer science and mathematics.

- Physics Minor (p. 251)

Faculty

Matthias Dietrich, Assistant Professor (2014), M.A., Ph.D. University of Gottingen, Germany

William J. Hansen, Department Chair, Professor (2005), B.A. State University of New York Albany; M.A. Hunter College; Ph.D. City University of New York Graduae Center

Francisco J. Lamelas, Associate Professor (2005), B.S. University of Wisconsin-Milwaukee; M.S. University of Wisconsin-Madison; M.S., Ph.D. University of Michigan

Nabin K. Malakar, Assistant Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Sudha R. Swaminathan, Professor (2005), A.B. (Physics), A.B. (Mathematics) Mount Holyoke College; M.S., Ph.D. University of Michigan

PY-101 Introduction to Astronomy
LASC Categories: NSP
Tools of the astronomer. The nature of stars, their location and cosmology. Planets and the solar system.
Every year. 3 Credits

PY-105 Concepts in Physics I
LASC Categories: NSP, LAB
Prerequisites: Accuplacer score of 3 or above or successful completion of college-level math class
Concepts and physical principles of motion, force, mechanical work, energy, and momentum. Torque and angular momentum. Fluids, heat, and thermodynamics. Two hours lecture and one two-hour laboratory. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.
Every year. 3 Credits

PY-106 Concepts in Physics II
LASC Categories: NSP
Prerequisites: Accuplacer score of 3 or above or successful completion of a college-level math class.
Electrostatics, including electric forces and electric potential. Simple circuits, electrical power, and generators. Magnetic fields and forces, light, and relativity. Credit will not be awarded for more than one of PY 106, PY 222, and PY 242."
Every year. 3 Credits

PY-112 Physics in Art
LASC Categories: NSP, LAB, QAC, WAC
Prerequisites: Accuplacer score of 3 or above or successful completion of a college-level math class, and EN-102.
Concepts in optics and modern physics applied to the analysis of paintings, conservation of art objects, and detection of forgeries. Three hours lecture and two hours laboratory.
Every year. 4 Credits

PY-114 Physics of Waves
LASC Categories: NSP, QAC
Prerequisites: Accuplacer score of 3 or above or successful completion of a college-level math class.
Wave phenomena, including water waves, sound, acoustics, musical instruments, optics and quantum mechanics. Analysis of propagation, power, scattering and interference.
Every year. 3 Credits

PY-193 First Year Seminar
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

PY-221 General Physics I
LASC Categories: LAB, NSP, QAC
Prerequisites: MA-190 (or higher)
Physics with algebra and trigonometry, including kinematics, dynamics, energy, momentum, gravity, oscillators, waves and heat. Three hours lecture and two hours lab. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.
Every year. 4 Credits

PY-222 General Physics II
LASC Categories: LAB, NSP
Prerequisites: PY-221
Physics with algebra and trigonometry including electric and magnetic fields, resistance, capacitance, inductance, reflection, refraction, interference, relativity and quantum physics. Three hours lecture and two hours laboratory. Credit will not be awarded for more than one of PY 106, PY 222, and PY 242.
Every year. 4 Credits

PY-240 Optics
Prerequisites: one semester of college level physics and MA-190, or consent of instructor.
Image formation with mirrors and lenses. Interference, diffraction, dispersion, and polarization. Lasers. Microscopes and spectrometers. Cameras and image processing.
Every 2-3 years. 3 Credits

PY-241 Physics I (Mechanics)
LASC Categories: LAB, NSP, QAC
Prerequisites or Corequisite: one semester of calculus.
Physics with calculus, including kinematics, dynamics, energy, momentum, gravity, oscillators, waves and heat. Three hours lecture and two hours lab. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.
Every year. 4 Credits

PY-242 Physics II (Electricity, Magnetism and Optics)
LASC Categories: LAB, NSP
Prerequisites: PY-241 and one semester of calculus.
Physics with calculus including electric and magnetic fields, resistance, capacitance, inductance, reflection, refraction, interference, relativity and quantum physics. Three hours lecture and two hours lab. Credit will not be awarded for more than one of PY 106, PY 222, and PY 242.
Every year. 4 Credits

PY-250 Instrumentation/Elec Measure
Electricity and electrical circuits; electronic theory and instrumentation; transducer response in scientific measurements, control elements and recording devices.
Other or on demand. 3 Credits

PY-297 Selected Topics in Physics
Lecture or laboratory course in a selected area in physics. Topics announced in advance. Prerequisite: Consent of Instructor.
1-6 Credits

PY-310 Modern Physics
Prerequisites: MA-200 and either PY-222 or PY-242
Special relativity. The wave nature of matter, introductory quantum mechanics, and atomic physics. Condensed matter. Radioactivity. Nuclear and particle physics.
Every 2-3 years. 3 Credits

PY-360 Introduction to Materials Science
Prerequisites: CH-120 CH-121 and either PY-221 PY-222 or PY-241 PY-242
Physical structures of solids. Electrical, magnetic, thermal and optical properties of solids, liquids and soft matter. Structure-property relationships in materials. Cross-listed with CH-360.
Every 2-3 years. 3 Credits

PY-370 Introduction to Nuclear Science
Prerequisites: CH-120 CH-121 MA-200 and either PY-221 PY-222 or PY-241 PY-242.
Fundamentals of nuclear science. Topics include nuclear structure and forces, radioactive decays, nuclear reactions, and modern applications. Cross-listed with CH-370.
Every 2-3 years. 3 Credits

PY-408 Directed Study: Physics
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a physics faculty member.
3-4 Credits

PY-410 Independent Study: Physics
Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research. Prerequisite: Consent of Instructor.
Every year. 1-6 Credits

PY-451 Nuclear Instrumentation I
The structure, functions, and interactions of particulate and non-particulate radiations with matter, detection, calibration, dosage and statistical methods. [Cross listed as BI451.]
Every year. 4 Credits

PY-452 Nuclear Instrumentation II
Designed to further the skills of operating, calibrating, and performing routine maintenance on scanners, gamma cameras, well counters, and liquid scintillation counters. [Cross listed as BI452.]
Spring only and every year. 4 Credits

PY-460 Physics Internship
Advanced students assigned to external public or private agency, working under agency and physics faculty supervision. Prerequisite: Consent of physics faculty.
Fall and Spring and every year. 1-4 Credits

Physics Minor

A physics minor is useful in many technical fields because the study of physics develops an understanding of basic principles, mathematical modeling, and practical applications. Specific areas where a physics background is useful include imaging techniques in medicine and biology, analytical instrumentation in chemistry, remote-sensing techniques in the geosciences, and development of realistic physical models in computer science and mathematics.

Requirements for a Minor in Physics

18 credits in Physics including One of the following one year sequences:

PY-221 & PY-222	General Physics I and General Physics II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8

School of Humanities and Social Sciences

Dr. Russ Pottle

Dean of the School of Humanities and Social Sciences

Location

Sullivan Academic Center
Second Floor, Room S-210

- Business Administration and Economics (p. 268)
- Communication (p. 280)
- Criminal Justice (p. 291)
- English (p. 306)
- History and Political Science (p. 318)
- Philosophy (p. 346)
- Psychology (p. 355)
- Sociology (p. 366)
- Urban Studies (p. 388)
- Visual and Performing Arts (p. 253)
- World Languages (p. 411)

Art

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts (p. 253), one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts.

Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Minor in Art

(See Visual and Performing Arts Department (p. 253) for a complete listing of requirements and courses.)

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art related courses, including a minimum of three credits in art history and at least one art course at the 300-level.

SELECT	AR Electives	12
SELECT	Art History Elective	3
SELECT	AR Elective 300+	3
Total Credits		18

Visual and Performing Arts

Department of Visual and Performing Arts

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

- Art Minor (p. 253)
- Composition and Music Technology Minor (p. 267)
- Music Minor (p. 266)
- Theatre Minor (p. 267)

- Visual and Performing Arts and Education, Double Major (p. 264)
- Visual and Performing Arts Major (p. 263)

Michael C. Hachey, Professor (1993), B.F.A., M.F.A. Massachusetts College of Art

Stacey Parker, Associate Professor (2007), B.F.A. Alfred University; M.F.A. Rochester Institute of Technology

Amaryllis Siniossoglou, Professor (2005), PEP Royal College of Art, London; M.F. A. University of Massachusetts, Amherst; Ecole Nationale Superieure Des Beaux-Arts, Paris; Diplome Superieur d' Art Plastique; School of Art, Athens; Certificate, Drawing and Painting School

Catherine Wilcox-Titus, Professor (2004), B.A. University of Toronto; M.S. Simmons College; M.A., Ph.D. Boston University

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A. Eastman School of Music

Christie B. Nigro, Professor (1989), B.M. Syracuse University; M.M Yale University; Ph.D. University of Massachusetts

Robert Sahagian, Professor (1968), B.M. New England Conservatory of Music; M.M., Ph.D. Michigan State University

John H. Hood, Professor (2004), B.F.A. Arizona State University; M.F.A. University of Minnesota

Sam O'Connell, Associate Professor (2010), B.A., M.A. Washington University; Ph.D. Northwestern University

Adam Zahler, Department Chair, Professor (2007), B.A. University of Vermont; M.F. A. University of Virginia

Art Courses

AR-100 Cross Media Studio
LASC Categories: CA, TLC
An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.
Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation
This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.
Fall and Spring and every year. 3 Credits

AR-112 World Art Survey I
LASC Categories: CA, TLC, DAC
Surveys the world's major cultural achievements in the visual arts from the prehistoric period to ca. 1400.
Every year. 3 Credits

AR-113 World Art Survey II
LASC Categories: CA, TLC, DAC
Major cultural achievements in the visual arts from ca 1400 to the early twentieth century.
Every year. 3 Credits

AR-117 Visual Design: 2 Dimensions
LASC Categories: CA
A foundation for visual literacy through studio work utilizing such art elements as line, form, color, and texture.
Fall and Spring and every year. 3 Credits

AR-118 Global Art History
LASC Categories: GP, WAC, DAC
Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.
Every year. 3 Credits

AR-122 Visual Design: 3-DIMENSIONS
LASC Categories: CA
A foundation for visual literacy through studio work utilizing spatial elements such as plane, mass, volume, and structure.
Fall only and every year. 3 Credits

AR-123 Design Fundamentals
LASC Categories: CA, QAC
Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibbonaci series, fractals, regular solids.
Fall and Spring and every year. 3 Credits

AR-130 Painting I
LASC Categories: CA
An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression
Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals
LASC Categories: CA, GP, DAC
The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.
Fall and Spring and every year. 3 Credits

AR-150 Life Studio I
LASC Categories: CA
Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.
Fall and Spring and every year. 3 Credits

AR-160 Sculpture I
LASC Categories: CA, GP, WAC
Prerequisites: EN-102
Three-dimensional studio creations through a variety of traditional and contemporary materials. Both realistic and abstract concepts are explored.
Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms
LASC Categories: CA, GP, WAC, DAC
Prerequisites: EN-102
A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.
Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art
3 Credits

AR-193 First Year Seminar in Art
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

AR-200 History of American Art
LASC Categories: CA, TLC
A survey of the visual arts in the United States, from the Colonial Period to the present.
Spring only and other or on demand. 3 Credits

AR-210 Drawing and Painting Studio
LASC Categories: CA
This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.
Fall and Spring and every year. 3 Credits

AR-220 Foundations of Modern Art
LASC Categories: TLC, CA
Influential 19th Century developments, such as Romanticism, Realism, and Impressionism, are discussed in relationship with early 20th Century art.
Fall and Spring and every 2-3 years. 3 Credits

AR-225 Art Since Mid-20th Century
LASC Categories: CA, GP, WAC, DAC
Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.
Fall only and every year. 3 Credits

AR-230 Printmaking
LASC Categories: CA
Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.
Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio
LASC Categories: CA, GP
This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage and use historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.
Fall and Spring and every year. 3 Credits

AR-240 Watercolor
LASC Categories: CA, TLC
A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.
Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools
LASC Categories: CA
An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.
3 Credits

AR-270 Driftwood to Dumpsters
LASC Categories: CA, TLC, WAC
Prerequisites: EN-102
Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.
Every 2-3 years. 3 Credits

AR-275 Gallery and Museum Studies
LASC Categories: CA, TLC
All aspects of installation and exhibition of art work in WSU gallery, including solicitation of art, publicity, display, and management.
Every 2-3 years. 3 Credits

AR-285 History of Photography
LASC Categories: CA, TLC
The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]
Every 2-3 years. 3 Credits

AR-300 Painting II
Prerequisites: AR-130 or consent of instructor.
Continuation of painting with emphasis on individual development through interpretive projects.
Spring only and every 2-3 years. 3 Credits

AR-302 Drawing II
Prerequisites: AR-140 or consent of instructor
Advanced projects in drawing with increasing emphasis on individual direction.
Fall and Spring and every 2-3 years. 3 Credits

AR-306 Sculpture II
Prerequisites: AR-160 or consent of instructor.
Further exploration of sculptural form with a diversity of materials, techniques, and expressive meaning.
Spring only and every 2-3 years. 3 Credits

AR-330 Intermediate Printmaking
Prerequisites: AR-230
Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.
Every year. 3 Credits

AR-350 Special Topics in Art
Prerequisites: one studio course or consent of instructor.
A course covering topics which vary in response to specific student and faculty interest.
Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art
An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.
Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone
LASC Categories: CAP
Students research, design, and create their work for public presentation and evaluation by a faculty board of review. This is the final course in the Art Major and is a requirement for all the majors.
Spring only and every year. 3 Credits

Music Courses

MU-100 Music Fundamentals
LASC Categories: CA
An introduction to the rudiments of music theory, including pitch and rhythmic organization. Emphasis is placed on intervals, major and minor scales, reading and writing rhythm, and chord structures.
Fall and Spring and every 2-3 years. 3 Credits

MU-101 Fundamentals of Music and Aural Skills
LASC Categories: CA
An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.
Every year. 3 Credits

MU-102 Applied Music
Prerequisites: Audition required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and every year. 1 Credit

MU-104 Class Piano
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano technique and pedagogy in a group setting of 12 or fewer
Fall and Spring and every year. 1 Credit

MU-106 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation
LASC Categories: CA
General survey of masterpieces of major composers of various periods in history of music.
Fall and Spring and every year. 3 Credits

MU-120 Ear Training
Prerequisites: MU-100 or MU-101
An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfege.
Every year. 3 Credits

MU-125 Jazz Appreciation
LASC Categories: CA, TLC
Surveys the history of jazz beginning with the earliest roots in the American South to today.
Every year. 3 Credits

MU-140 World Music
LASC Categories: CA
An introducation to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.
Spring only and every 2-3 years. 3 Credits

MU-150 Opera
Analysis of the masterworks of the standard operatic repertoire.
Spring only and every year. 3 Credits

MU-175 Music in America
Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.
Other or on demand. 3 Credits

MU-185 Composition I
LASC Categories: CA
Prerequisites: MU-100 or MU-101
An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.
Spring only and every year. 3 Credits

MU-190 Piano Class
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano proficiency. Class topics will include an introduction to the keyboard, hand position, and music theory. Solo literature appropriate to the level will be studied.
1 Credit

MU-193 Special Topics in Music:First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

MU-195 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Every year. 1 Credit

MU-200 Issues in Music
This course deals with topics of special interest, in both seminars and studio environments at an introductory level.
3 Credits

MU-202 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I
LASC Categories: CA
Prerequisites: MU-100 or 101.
Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.
Spring only and other or on demand. 3 Credits

MU-208 Music Software
Prerequisites: MU-100 or MU-101
A survey of music software including Finale, Sibelius, Logic, GarageBand and other current applications. Students will explore the features of each program relative to notation, composition, arranging, and recording.
Every year. 3 Credits

MU-210 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Analysis and application of harmonization techniques using diatonic and chromatic chords. Emphasis is placed on voice-leading, non-chord tones, secondary chords, and modulation.
Other or on demand. 3 Credits

MU-213 Music Technology of MIDI Systems and Digital Audio
Prerequisites: MU-100 or knowledge of notation and department consent.
Offers study in MIDI/Digital Audio Systems and electronic music synthesis in a Macintosh environment. Prepares student interested in audio engineering.
Fall only and every year. 3 Credits

MU-215 Chorus and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.
Fall and Spring and every year. 3 Credits

MU-220 Chorus
LASC Categories: CA
Prerequisites: MU-215
Mixed Chorus repertoire. May be repeated.
Fall and Spring and every year. 1 Credit

MU-222 African Drumming
LASC Categories: GP, CA, DAC
An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.
Every year. 3 Credits

MU-225 Band
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in repertoire and performance. May be repeated.
Fall and Spring and every year. 0.5-1 Credits

MU-226 Band and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in music notation and style of instrumental music. Participation in college band required.
Fall and Spring and other or on demand. 3 Credits

MU-228 Piano Ensemble
LASC Categories: CA
Prerequisites: MU-102 or MU-190
A small ensemble for keyboard players who will learn, explore, and perform four- hand piano repertoire.
Every year. 1 Credit

MU-231 Women in Music
LASC Categories: CA, TLC
A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.
3 Credits

MU-234 Music of the Baroque Period
The period of 1600-1750 with emphasis on Bach and Handel.
Fall and Spring and other or on demand. 3 Credits

MU-235 Music of the Classical Period
The period 1750-1827; Haydn, Mozart and Beethoven.
Fall and Spring and every year. 3 Credits

MU-237 Music in the Elementary School
LASC Categories: CA
Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.
Other or on demand. 3 Credits

MU-240 Music of the Romantic Period
An examination of Nineteenth Century music, beginning with Beethoven. [MU 140]
Fall and Spring and every 2-3 years. 3 Credits

MU-245 20th Century Music
A comprehensive study and general listener's approach to contemporary music beginning with Impressionism.
Spring only and every 2-3 years. 3 Credits

MU-250 Music of the Cinema:Spectacle, Splendor, And Spielberg
LASC Categories: CA, TLC
An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.
Spring only. 3 Credits

MU-255 The Golden Era of Piano Music
LASC Categories: CA
A survey of piano music beginning with Beethoven and continuing through the Romantic tradition to the early twentieth century.
Every 2-3 years. 3 Credits

MU-260 Symphonic Music
LASC Categories: CA
A survey of symphonic music beginning with the Classical Period.
Spring only and every 2-3 years. 3 Credits

MU-265 The Concerto
LASC Categories: CA
The concerto from the eighteenth to the twentieth century with emphasis on the development of the piano concerto.
Spring only and every 2-3 years. 3 Credits

MU-270 Music in Horror Films
A survey of scores composed for horror films. Emphasis is placed on the role of music in the genre and the composer's interpretation of various components of screenplays, including narrative, characters, and emotional content.
Every 2-3 years. 3 Credits

MU-275 Computers and Music
Prerequisites: MU-205
An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance, Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.
Other or on demand and other or on demand. 3 Credits

MU-280 History of Music
A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.
Fall and Spring and every year. 3 Credits

MU-281 Music History I
LASC Categories: CA
A general historical survey of Western art music from the Medieval, Renaissance, and Baroque Periods.
Every year. 3 Credits

MU-282 Music History II
LASC Categories: CA
A general survey of Western art music from the Classical and Romantic Periods, and the Twentieth Century.
Every year. 3 Credits

MU-285 Composition II
Prerequisites: MU-185 or MU-204, and MU-205.
A continuation of Composition I. Students will explore methods of tonal composition Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.
Fall and Spring and every year. 1 Credit

MU-300 Chorale
LASC Categories: CA
Prerequisites: Audition Required
Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated.
Every year. 1 Credit

MU-302 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall only and every year. 1 Credit

MU-305 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.
Fall only and every year. 3 Credits

MU-310 The American Musical in Performance
Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.
Every 2-3 years. 3 Credits

MU-321 Small Ensemble
LASC Categories: CA
The performance of musical works by a small ensemble. By permission of instructor or audition.
Fall and Spring and every year. 0.5-1 Credits

MU-375 Sound Synthesis
Prerequisites: MU-275
A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-380 Form and Analysis
Prerequisites: MU-210
An introduction to and analysis of the formal structures of music.
Fall and Spring and every year. 3 Credits

MU-385 Composition III
Prerequisites: MU-285 and MU-305.
An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter, This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.
Fall and Spring and every year. 1 Credit

MU-400 Independent Study in Music
Prerequisites: Consent of Instructor
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall and Spring. 1 Credit

MU-408 Directed Study: Music
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

MU-410 Special Topics in Music
This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio enviorments.
3 Credits

MU-485 Composition IV
Prerequisites: MU-385
Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.
Other or on demand. 1 Credit

Theatre Courses

TH-145 Acting I
LASC Categories: CA
Introductory acting theory and practice. Students present brief monologues and scenes in class.
Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre
LASC Categories: CA
An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.
Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

TH-226 Script Analysis
LASC Categories: CA, TLC, DAC
Script analysis for theatre artists. How to take a script from initial reading to production.
Every 2-3 years. 3 Credits

TH-236 History of Theatre I
LASC Categories: CA, TLC
Survey of world theatre from Golden Age of Athens to Restoration England including brief overview of Asian theatre.
Fall and Spring and every 2-3 years. 3 Credits

TH-237 History of Theatre II
LASC Categories: TLC, GP, DAC
Survey of western theatre from Eighteenth to Twentieth Century, with reference to roots and development in other world cultures.
Fall and Spring and every 2-3 years. 3 Credits

TH-246 Voice and Movement
Prerequisites: TH-191 and TH-245
Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.
Every year. 3 Credits

TH-270 History of American Entertainment I
LASC Categories: CA, USW
An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.
Every year. 3 Credits

TH-271 History of American Entertainment II
LASC Categories: CA, USW
An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.
Every year. 3 Credits

TH-272 History of Costume
LASC Categories: CA
The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.
Every 2-3 years. 3 Credits

TH-275 Introduction to Stagecraft and Design
LASC Categories: CA
Basic theories of scenic, costume, and design with practicum.
Other or on demand. 3 Credits

TH-290 Theatre for Young Audiences
LASC Categories: ICW, CA, DAC
Organization of children's theatre, script selesction, visual design, rehearsal and performance.
Investigation of creative drama as a teaching tool in elementary education.
Spring only and other or on demand. 3 Credits

TH-292 Creative Dramatics
LASC Categories: CA, ICW
Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.
Every year. 3 Credits

TH-321 Rehearsal and Performance
LASC Categories: CA
Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.
Spring only and every year. 3 Credits

TH-345 Acting II
Prerequisites: TH-191 TH-245
Further development of acting skills with emphasis on stage-acting technique.
Every year. 3 Credits

TH-348 Stage Combat
LASC Categories: CA, ICW
Prerequisites: TH-191
Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.
Every year. 3 Credits

TH-355 Theatre Practicum
Practical work on Theatre production in various areas including acting, design, stage management, construction, etc.
Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre
LASC Categories: CA
Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.
Every year. 3 Credits

TH-370 Costume Design for Theatre
LASC Categories: CA
Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.
Every year. 3 Credits

TH-380 Directing
Prerequisites: TH-245 and TH-191
Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.
Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre
LASC Categories: CA
Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.
Every year. 3 Credits

TH-399 Special Topics in Theatre
Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).
Other or on demand and other or on demand. 3 Credits

TH-408 Directed Study: Theatre
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Visual and Performing Arts Courses

VP-155 First Year Practicum
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.
Spring only and every year. 1 Credit

VP-191 Special Topics
Introductory course to cover various topics
3 Credits

VP-193 Special Topics in Visual and Performing Arts: First-Year Students
LASC Categories: FYS
Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.
Every year. 3 Credits

VP-200 Critical Thinking in the Arts
LASC Categories: CA, TLC, DAC, QAC
The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.
Every year. 3 Credits

VP-210 Contemporary Dance Styles I
LASC Categories: CA
The study and movement of dance vocabularies in one or more contemporary and modern styles.
Every year. 3 Credits

VP-255 Second Year Practicum
Prerequisites: VP-155
Students will put into practice interdisciplinary concepts, ideas, and techniques at a exploratory level.
Spring only and every year. 1 Credit

VP-300 Interdisciplinary Arts Seminar
Prerequisites: VP-200
Examines examples of contemporary modes of collaborative, interdisciplinary, and cross-disciplinary works of music, theatre, and visual art.
Fall only and every year. 3 Credits

VP-310 Contemporary Dance Styles II
LASC Categories: CA
Prerequisites: VP-210
The study and movement of contemporary dance vocabularies at the intermediate to advanced level.
Every year. 3 Credits

VP-355 Third Year Practicum
Prerequisites: VP-155 and VP-255
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.
Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory
Prerequisites: VP-200
An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.
Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice
Prerequisites: VP-364
Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.
Spring only and every year. 3 Credits

VP-375 Special Topics
A course that varies according to specific student and faculty interest.
Other or on demand. 3 Credits

VP-400 Arts Capstone/Senior Thesis
LASC Categories: CAP, WAC
Prerequisites: VP-200 VP-300 EN-102
Students research, design, and create works of art, music, and theatre for public presentation and evaluation by a faculty board of review.
Every year. 3 Credits

VP-405 Independent Study in the Arts
Prerequisites: Permission of Instructor
An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.
Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

VP-410 Special Topics in the Arts
Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]
Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts
Advanced students gain practical experience in a working arts environment.
Fall and Spring and every year. 3-12 Credits

Visual and Performing Arts Major

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

Students who select a VPA Major also select a concentration in Art, Music or Theatre. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students must complete the foundation courses plus the course required for a concentration in Art, Music or Theatre.

Requirements for a VPA Major – Foundation Courses

Minimum requirement for the major is completion of a three course (9 credit) Foundation curriculum, a three course (9 credit) Interdisciplinary Core, and 27 credits in one of three concentrations. Students will declare a concentration in Art, Music, or Theatre.

Interdisciplinary Foundation Courses		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Total Credits		18

Visual and Performing Arts and Education, Double Major

Students who double major in Early Childhood or Elementary Education may concentrate in Art, Music, Theatre, or Visual and Performing Arts.

They will fulfill the Interdisciplinary Foundation and Core requirements plus requirements in their concentration for a total of 36 credits.

Requirements for an Emphasis in Art for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Art for Students who double major in Early Childhood or Elementary Education		(18 credits)
Art History		
Select one of the following:		3
AR-112	World Art Survey I	
AR-113	World Art Survey II	
AR-225	Art Since Mid-20th Century	
Studio Art		
AR-117	Visual Design: 2 Dimensions	3
AR-122	Visual Design: 3-DIMENSIONS	3
AR-140	Drawing Fundamentals	3
Art Pedagogy		
AR-260	Visual Arts in the Schools	3
Electives		
Art electives		3
Total Credits		36

Requirements for an Emphasis in Music for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Music for Students who double major in Early Childhood or Elementary Education		(18 credits)
Music Theory		
MU-101	Fundamentals of Music and Aural Skills (Unless taken as foundation)	3
or MU-205	Music Theory I	
Music Literature		
Select one of the following:		3
MU-115	Music Appreciation (Unless taken as foundation)	
MU-281	Music History I	
MU-282	Music History II	
Applied Music (Lessons and Ensembles)		
Select one of the following:		2
MU-102	Applied Music (1 credit each)	
MU-104	Class Piano	
Participation in two Ensembles at .5 credits each		1
Music Pedagogy		
MU-237	Music in the Elementary School	3
Electives in Music		
Electives		6
Total Credits		36

Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
Theatre Pedagogy		
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Performance and Production		
TH-145	Acting I	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Electives in Theatre		
Electives		3
Total Credits		36

Requirements for an Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
AR-260	Visual Arts in the Schools	3
MU-237	Music in the Elementary School	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Electives in Art, Music, Theatre, and Visual and Performing Arts		
Electives		6
Total Credits		36

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art related courses, including a minimum of three credits in art history and at least one art course at the 300-level.

SELECT	AR Electives	12
SELECT	Art History Elective	3
SELECT	AR Elective 300+	3
Total Credits		18

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music minor, students complete courses in the performance, history, composition, and theory of music, and also in applied music. Students must audition for applied music spots. Students are provided with opportunities to perform in ensembles as well as take a wide variety of classroom courses to enhance musical understanding and literacy.

Requirements for a Minor in Music

18 credits in music with 3 credits are required in each of the following:

Music Theory		(3 credits)
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-205	Music Theory I	
Music History		(0 credits)

SELECT	Music History (MU 115 Music Appreciation or historical period courses)	
Applied Studies		(3 credits)
private lessons or ensembles		3
Electives		(9 credits)
9 credits in music electives		9
Total Credits		15

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Students choose courses based on personal interest from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least ones stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

Business Administration

Department of Business Administration and Economics

The Business Administration program enables students to acquire competencies necessary to manage the business, human, financial, and technological resources of organizations. The major in Business Administration offers six concentrations: Management, Accounting, Finance, Marketing, International Business, and Entrepreneurial Studies and Small Business Management.

Admission Requirements

Application to the department after completion of the following prerequisite courses:

CS-120	Microcomputer Applications	3
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	
Total Credits		18-19

To be accepted to the major, a student must complete all prerequisite courses with a C (2.0) or better average.

- 4Plus1 Program (p. 273)
- Business Administration Major (p. 273)
- Business Administration Major, Concentration in Accounting (p. 275)
- Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management (p. 276)
- Business Administration Major, Concentration in Finance (p. 276)
- Business Administration Major, Concentration in International Business (p. 277)
- Business Administration Major, Concentration in Management (p. 277)
- Business Administration Major, Concentration in Marketing (p. 278)
- Business Administration Minor (p. 279)

Faculty

Mary E. Clay, Assistant Professor (2012), B.S. Fitchburg State University; M.B.A. Anna Maria College; D.B.A. Argosy University; CPA Commonwealth of Massachusetts

Laurie A. Dahlin, Professor (2001), B.S. Nichols College; M.B.A. Assumption College; D.B.A. Nova Southeastern University; CMA Institute of Management Accountants

Paul A. Dubrey, Jr, Assistant Professor (2016), B.S. Assumption College; M.B.A. Nichols College; CPA Commonwealth of Massachusetts; CFE Certified Fraud Examiner

Robert C. Fink, Professor (2002), B.A. Coe College; M.B.A. University of Iowa; D.B.A. Boston University

Malcolm Hill, Assistant Professor (2017), B.S., Lehigh University; M.B.A., Babson College; M.Ed., Worcester State College; D.M., University of Pheonix

Robert V. Holmes, Assistant Professor (2017), A.S. Northern Essex Community College; B.S. Lesley University; M.B.A. Salem State University; Ph.D. Northeastern University

Tejendra N. Kalia, Professor (2004), B.E. Indian Institute of Technology; M.E. McGill University; M.B.A. Anna Maria College; D.B.A. Nova Southeastern University

Mark L. Love, Department Chair, Associate Professor (2006), B.S.B.A., M.B.A. Nichols College; CPA Commonwealth of Massachusetts

Joan Mahoney, Professor (2002), B.S., North Adams State College; M.B.A., Western New England College; Ph.D., University at Buffalo (SUNY)

Rodney Oudan, Professor (2005), CIM Chartered Institue of Marketing; PgCert University of the West Indies, UWI; M.M. Cambridge College; D.B.A. Nova Southeastern University

Wei Pang Lee, Professor (1992), B.A. Soochow University, Taipei, Taiwan; M.B.A. Northwest Missouri State University; Ph.D. University of Georgia

Miriam L. Plavin-Masterman, Assistant Professor (2013), B.S. Cornell University; M.B.A. Dartmouth College; M.A., Ph.D. Brown University

Michael Shamgochian, Assistant Professor (2017), B.A., University of Massachusetts Amherst; J.D., Suffolk University

Elizabeth A. Siler, Associate Professor (2008), B.A. Boston University; M.B.A. Simmons College; Ph.D. University of Massachusetts, Amherst

Spyridon Tsakas, Instructor (2017), B.Sc., American College of Greece; M.Sc., Edinburgh University

Lingling Wang, Assistant Professor (2016), B.A. Xi'an International University; M.B.A. Ecuador Military School of Technology; M.S., D.B.A. Southern New Hampshire University

Elizabeth J. Wark, Professor (2007), B.A. Mount Holyoke College; M.B.A. University of Massachusetts; M.A., Ph.D. Clark University

BA-100 Introduction to Business
Introduction to basic concepts related to business practices; includes examination of local, regional and national organizations in the business world.
3 Credits

BA-193 Special Topics in Business First -Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. offered nly as a First-Year Seminar.
3 Credits

BA-200 Principles of Management
Study of management practices and behavior in organizational settings; emphasis on introduction to managerial principles, concepts and fundamentals.
3 Credits

BA-210 Financial Accounting I
Principles, concepts, procedures, and techniques of financial accounting necessary for preparation, understanding, and interpretation of accounting information.
Every year. 3 Credits

BA-220 Financial Accounting II
Prerequisites: BA-210
Continuation of the topics covered in BA 210.
Every year. 3 Credits

BA-230 Managerial Accounting
Prerequisites: BA-220
Analysis, interpretation and use of accounting data for effective managerial planning, control and decision-making.
Every year. 3 Credits

BA-250 Analytical Techniques in Business
Prerequisites: BA-200, BA-220, CS-120 or CS-121, MA-150 or EC-207 or EC-150
Identification and analysis of common business problems using proper quantitative techniques and standard business software.
Every year. 3 Credits

BA-300 Organization Theory
Prerequisites: BA-200
A macro examination of organizations utilizing current research findings based largely upon a systems/contingency framework, designed to improve organizational effectiveness.
Every year. 3 Credits

BA-302 Introduction to Entrepreneurship
Students learn and explore the nature and challenges of entrepreneurship; venture the life cyle of opportunity-launch-growth-fruitage.
Every year. 3 Credits

BA-303 Small Business Management
This course focuses on essential management skills relating to starting and managing a small business where one or few individuals provide initial financing.
Every year. 3 Credits

BA-304 Women Entrepreneurs and Leaders
Students will focus on the research of women business leaders and the roles they have played in the global economy.
Every year. 3 Credits

BA-305 Organizational Behavior
Prerequisites: BA-200
Study of organizational effectiveness and quality of working life, through individual, organizational, and contextual level theories and practices.
Every year. 3 Credits

BA-306 Human Resource Management
Prerequisites: BA-305
An examination of human resource management including employment laws, recruiting/selection, training/development, and benefits/compensation administration.
Every 2-3 years. 3 Credits

BA-312 Operations Management I
Prerequisites: BA-200, CS-120, and MA-150 or EC-207 or EC-150
Applied analysis of operations in service and production systems using quantitative models and calculus, inventory, work measurement, scheduling, quality control.
Every year. 3 Credits

BA-316 Financial Management
LASC Categories: QAC
Prerequisites: BA-220
Financial analysis, working capital management, and basics of capital budgeting.
Every year. 3 Credits

BA-318 Principles of Marketing
Prerequisites: BA-200, EC-110 and EC-120.
Overview of the full range of activities involved in marketing, develops an understanding of marketing strategy and processes.
Every year. 3 Credits

BA-320 Business Law I
Prerequisites: BA-200
Introduction to legal concepts as applied to the study of contracts, personal property, sales, and the Uniform Commercial Code.
Every year. 3 Credits

BA-321 Business Law II
Prerequisites: BA-320
Continuation of topics covered in BA320. Study of laws of partnerships and corporations.
3 Credits

BA-327 Ethical Decision Making in Business
Prerequisites: BA-200 BA-210 BA-318
This course will identify, discuss, and analyze ethical issues faced by business professionals and discuss approaches for resolving ethical dilemmas.
Every year. 3 Credits

BA-350 Business Information Systems and Applications
Prerequisites: CS-120 and BA-230 or BA-374
Survey of automated business information systems and microcomputer applications with emphasis on business oriented software.
Every year. 3 Credits

BA-351 Managing Ebusiness
Digitizing new forms of business organizations to create business-to-business partnerships, business-to-consumer relationships, pathways-to- profitability; legal,ethical, social, political and global issues.
3 Credits

BA-355 Insurance and Risk Management
Prerequisites: BA-200
This survey course covers the identification and evaluation of risk and techniques for the management of risk. Commercial and personal risks are studied from the points of view of the corporation, the individual, and the insurer. Areas of emphasis include commercial property,business liability, workers compensation, automobile, life, health, disability, and income insurance.
Every year. 3 Credits

BA-362 Accounting for Non-Profit Organizations
Prerequisites: BA-371
Specialized area of accounting for unique requirements for non-profit organizations; includes analysis of budgeting, financial statements and other unique accounting requirements needed by management to assess the controls of a non-profit entity.
3 Credits

BA-370 Intermediate Accounting I
Prerequisites: BA-210 and BA-220
Accounting theory, principles, concepts, and procedures applied to balance sheet, and income statement accounts. Presentation and interpretation of financial reports.
Every year. 3 Credits

BA-371 Intermediate Accounting II
Prerequisites: BA-370
Continuation of BA 370.
Every year. 3 Credits

BA-372 Advanced Accounting I
Prerequisites: BA-370
Examines specialized topics in accounting including business combinations, partnerships, foreign currency transactions and translation, IFRS, nonprofit and governmental accounting.
Every year. 3 Credits

BA-374 Cost Accounting
Prerequisites: BA-200, BA-210 and BA-220
Accounting for costs in business enterprises. Emphasis placed on fundamental principles including job order, process, and standard costs.
Every year. 3 Credits

BA-375 Federal Income Taxes I
Prerequisites: BA-370
A study of federal income taxation as applied to individuals.
Every year. 3 Credits

BA-376 Auditing
Prerequisites: BA-370
Basic auditing concepts and developments and their application to the examination, evaluation, and reporting of financial data.
Every year. 3 Credits

BA-377 Federal Income Taxes II
Prerequisites: BA-375
Federal income taxes for corporations and partnerships.
3 Credits

BA-380 Negotiations
Prerequisites: BA-200 BA-210 BA-220 BA-305 EC-110 EC-120
This course focuses on effective negotiations, conflict management, and power and influence in organizational and other settings.
Every year. 3 Credits

BA-385 Leadership
Prerequisites: BA-200 BA-305
This course focuses on leadership theories, skills and applications. Self-assessment and reflection are important learning components of this course.
Every year. 3 Credits

BA-390 Business and Social Research Methods
LASC Categories: WAC
Prerequisites: BA-200 EN-102
An overview of research design approaches and the basic techniques of data collection employed by social scientists conducting empirical research.
3 Credits

BA-400 Management and Organizational Behavior II
Prerequisites: BA-305
Study of concepts, theory, research and operational problems of organizational behavior; work groups and intergroup behavior models.
Other or on demand. 3 Credits

BA-401 Management and Organizational Behavior II
Prerequisites: BA-400
Continuation of topics covered in BA 400 with additional theory and case studies; behavioral science/systems approach is taken.
3 Credits

BA-402 Designing the Business Plan
Prerequisites: BA-302
Develop a complete business plan, including value propositions, market and product feasibility analyses, and projected financial statements.
Every year. 3 Credits

BA-404 Corporate Finance
Prerequisites: BA-316
Advanced capital budgeting, capital structure, long-term financing decisions,dividend policy, computer modeling, comprehensive financial strategy cases.
Every 2-3 years. 3 Credits

BA-406 Trends in Marketing
Prerequisites: BA-318
Integrates all aspects of marketing theory through readings, case studies, class projects, individual projects and computer simulation of marketing decisions.
3 Credits

BA-408 Directed Study: Business Administration
Prerequisites: BA-312
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

BA-414 Real Estate Investment
Prerequisites: BA-316
This course covers the fundamental concepts, principles, analytical methods, and tools used in making residential and commercial real estate investment decisions.
Every year. 3 Credits

BA-415 Investment Analysis
Prerequisites: BA-316
Survey of investment vehicles, including stocks, bonds, real estate, commodities, mutual funds, and collectibles. Modern portfolio and valuation theories.
Spring only and every year. 3 Credits

BA-416 Financial Markets and Institutions
Prerequisites: BA-316
Study of banks, investment banking, money markets, and the financial service industry as they affect long and short-term financing decisions.
Other or on demand. 3 Credits

BA-420 Marketing Research
Prerequisites: BA-318
Nature and scope of marketing research. Application of scientific methods, sources, and collection of data, reporting and evaluation.
Spring only and every year. 3 Credits

BA-422 Retailing
Prerequisites: BA-318
Demand analysis, consumer behavior, planning, and control of the merchandising functions; retailing as a career.
Spring only and other or on demand. 3 Credits

BA-424 Advertising Management
Prerequisites: BA-318
Advertising from a planning perspective. Advertising and professional promotion strategies with execution and control activities.
Spring only and other or on demand. 3 Credits

BA-426 Consumer Behavior
Prerequisites: BA-318
The analysis of the consumer decision process as it affects marketing management decisions. Major factors of influence in this process will be studied including culture, social class, family, and reference groups.
Other or on demand. 3 Credits

BA-428 Business to Business Marketing
Prerequisites: BA-318
Explores business markets which account for more than half the economic activity globally.
Other or on demand. 3 Credits

BA-429 Integrated Marketing Communications
Prerequisites: BA-318
This course is designed for students who have an interest in increasing their knowledge of the marketing promotional process.
3 Credits

BA-430 Administrative Practices and Management
Prerequisites: BA-305
Overview and analysis of human conduct in work-organization settings.
Other or on demand. 3 Credits

BA-434 Management and Corporate Responsibility
Prerequisites: BA-200
The theoretical and practical relationships of corporate conflicts of interest, self-regulation, product liability, employee rights, etc., to management decisions.
Other or on demand. 3 Credits

BA-440 International Business and Management
Prerequisites: BA-316 and BA-318
Study and analyze the nature, structures and strategies of international/global businesses. Examine international markets, economic systems, value-chains and core competencies of a firm.
3 Credits

BA-450 Health Systems in America
A course focusing on the administration of institutions in the health area.
Other or on demand. 3 Credits

BA-470 Current Issues in Finance and Business Administration
Prerequisites: EN-102 or EN-202 and BA-305 and BA-316 and BA-318
This course provides a foundation in Information literacy related to the functional areas of Business Administration, with a particular focus in finance. The course examines current events in the business world and their applications to Accounting, Finance, Management, Marketing and/or Operations.
Alternating and every year. 3 Credits

BA-474 Corporate Law
Prerequisites: BA-320
Corporate powers and corporate management. Designed for future corporate executives and accountants.
Other or on demand. 3 Credits

BA-480 The Legal Environment of Business
Prerequisites: BA-200
The impact of governmental regulation on business and its response will be evaluated by unique debate-type format.
Fall and Spring and every year. 3 Credits

BA-481 Independent Study in Business Administration
Prerequisites: BA-200
Independent study in business administration, usually involving field work which is not an internship.
Fall and Spring and every year. 1-6 Credits

BA-482 Selected Topics: Business Administration
Prerequisites: BA-305, BA-316, and BA-318
Selection of topics of mutual interest to the student and faculty.
Fall and Spring and every year. 1-6 Credits

BA-486 Internship in Business Administration
Prerequisites: BA-305, BA-316, and BA-318
Practical experience in operations of business. Internships within co-operative business firms with on-site supervision and evaluation.
Fall and Spring and every year. 1-12 Credits

BA-490 Business Strategy and Policy
LASC Categories: CAP
Prerequisites: BA-316 and BA-318
Capstone course integrating information provided in the functional areas such as finance, marketing, general management, business legal environment.
Spring only and every year. 3 Credits

BA-491 Independent Study in Health Administration
Independent study in health, usually involving field work which is not an internship.
Fall and Spring and other or on demand. 1-6 Credits

BA-492 Selected Topics in Health Administration
Selected topics in health administration of mutual interest to the student and faculty.
Other or on demand. 1-6 Credits

BA-494 International Marketing
Prerequisites: EC-120 BA-318
With the rapid and continuous changes in global environment we will examine the complex issues in international marketing faced by today's manager.
Every year. 3 Credits

4Plus1 Program

The Department of Business Administration and Economics offers a Four Plus One program that allows Business Administration majors with GPAs of 3.0* or higher to gain admission to the M.S. in management during their junior year (they may apply once they have completed 75 credits) and to a begin taking classes as a senior. In order to complete the joint degree, in the final year of their bachelor's work, students may take two graduate level courses (6 credits). Please see the note below regarding which graduate classes may also count within the undergraduate BA major degree requirements. These graduate credits may be included in the undergraduate tuition of full-time state supported students. Students should take at least one summer class between the Spring of their BS graduation and the Fall in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class(es) may allow students to complete course requirements for the bachelor's and master's degree in five years (60 months). For more details, students should consult with the graduate coordinator of the M.S. Management Program.

Undergraduate Business Administration majors who are accepted into the 4Plus1 program may take the following graduate courses (6 credits maximum) and count them in both their BA undergraduate major and M.S in Management program. These courses will appear at the 500 level on their undergraduate transcripts and will be transferred at the 900 level for the M.S in Management program once they have completed their B.S. degrees. Students must have permission of the graduate instructor and the M.S. in Management graduate coordinator to take any graduate classes before they have finished their undergraduate degree program.

BA-960	Leadership Theory and Skills (may count in the BA electives or in the management concentration)	3
BA-962	Ethics and Social Responsibility of Leadership (may count in the BA electives or in the management concentration)	3
BA-915	Corporate Finance (this may be counted as a substitute for BA-404 in the BA electives or within the finance concentration.)	3
BA-912	Marketing Management (this may count in the BA electives or within the marketing concentration)	3

Business Administration Major

Requirements for a Major in Business Administration

48 credits in Business Administration, of which a minimum of 25 must be completed at Worcester State University.

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
BA Electives		(12 credits)
Other Upper Division (300-level or above) Business Administration courses		12
Total Credits		48

Note: A student may apply any two of the following EC courses towards the BA major as either part of the BA electives or as courses within either the Finance or International Business concentration or within the BA minor.

EC-205	Money, Banking, and Monetary Policy (Finance Concentration)	3
EC-301	Economic Development (International Business Concentration)	3
EC-307	International Finance (Finance or International Business Concentration)	3
EC-308	International Trade (International Concentration)	3

Once LASC requirements are satisfied, students may select general requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Sample Timeline for Completion of Degree

Business Administration

(for All Students Entering in Fall 2012 or Later)

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I (WR)	3
BA-200	Principles of Management	3
EC-150 or MA-150	Statistics (QR)[1] or Statistics I	3
EC-120 or EC-110	Introduction to Macroeconomics (HBS) or Introduction to Microeconomics	3
	Credits	15
Semester Two		
EN-102	English Composition II (WR)	3
EC-120 or EC-110	Introduction to Macroeconomics or Introduction to Microeconomics	3
CS-120	Microcomputer Applications (QR) [1]	3
LASC	LASC Elective (CON) (p. 49)	3
LASC	LASC Elective (DAC) (p. 51)	3
	Credits	15
Year Two		
Semester Three		
EC-202 or MA-202	Introduction to Mathematical Economics or Business Calculus	3-4
EN-253	Business Communications	3
BA-210	Financial Accounting I	3
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15-16
Semester Four		
BA-220	Financial Accounting II	3
BA-250	Analytical Techniques in Business	3
BA-318	Principles of Marketing	3

LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	16

Year Three

Semester Five

BA-305	Organizational Behavior	3
BA-230 or BA-374	Managerial Accounting or Cost Accounting	3
BA-316	Financial Management (QRAC)	3
LASC	LASC Elective (NSP) (p. 59)	3-4
SELECT	General Elective	3
	Credits	15-16

Semester Six

BA-312	Operations Management I	3
BA-350	Business Information Systems and Applications	3
BA-320 or BA-480	Business Law I or The Legal Environment of Business	3
SELECT	BA Concentration Elective	3
LASC	LASC Elective (WAC) (p. 66)	3
	Credits	15

Year Four

Semester Seven

BA-490	Business Strategy and Policy	3
SELECT	General Elective	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	15

Semester Eight

SELECT	BA Concentration Elective	3
SELECT	BA Concentration Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121-123

[1] One QR must be a MA course

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Accounting

Requirements for a Major in Business Administration, Concentration in Accounting

The Common Business Core together with four additional courses in the field of accounting chosen with the assistance of the advisor. Typical courses include:

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Accounting Concentration Courses		(12 credits)
BA-370	Intermediate Accounting I	3
BA-371	Intermediate Accounting II	3
BA-375	Federal Income Taxes I	3
BA-376	Auditing	3
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management

Requirements for a Major in Business Administration, Concentration in Entrepreneurial Studies and Small Business Management

The common Business Core together with two required plus two additional courses in the field chosen with the assistance of the advisor from the list below:

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Entrepreneurial Studies and Small Business Management Requirements		(12 credits)
BA-302	Introduction to Entrepreneurship	3
BA-402	Designing the Business Plan	3
Select two of the following:		6
BA-303	Small Business Management	
BA-304	Women Entrepreneurs and Leaders	
BA-351	Managing Ebusiness	
BA-420	Marketing Research	
SO-420	Seminar in Sociology	
Or any courses in the field as approved by BA program chair/instructor/advisor.		
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Finance

Requirement for Major in Business Administration, Concentration in Finance:

The common Business Core together with four additional courses in the field of Finance chosen with the assistance of the advisor from the list that follows:

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Finance Electives		(12 credits)
BA-404	Corporate Finance	3

Select three of the following:		9
BA-355	Insurance and Risk Management	
BA-414	Real Estate Investment	
BA-415	Investment Analysis	
BA-486	Internship in Business Administration (related to finance)	
EC-205	Money, Banking, and Monetary Policy	
EC-307	International Finance	
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in International Business

Requirement for Major in Business Administration, Concentration in International Business

The common Business Core together with four elective courses in the field of International Business chosen with the assistance of the advisor from the list that follows. A maximum of two of the courses listed below may be used.

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
International Business Electives		(12 credits)
Select four of the following:		12
BA-351	Managing Ebusiness	
BA-440	International Business and Management	
BA-481	Independent Study in Business Administration	
BA-482	Selected Topics: Business Administration	
BA-486	Internship in Business Administration	
BA-494	International Marketing	
EC-301	Economic Development	
EC-307	International Finance	
EC-308	International Trade	
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Management

Requirements for a Major in Business Administration, Concentration in Management

The Common Business Core together with four elective courses in the field of management chosen with the assistance of the advisor from the list below:

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3

BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Management Electives		(12 credits)
Select four of the following:		12
BA-300	Organization Theory	
BA-306	Human Resource Management	
BA-327	Ethical Decision Making in Business	
BA-380	Negotiations	
BA-385	Leadership	
BA-400	Management and Organizational Behavior II	
BA-401	Management and Organizational Behavior II	
BA-430	Administrative Practices and Management	
BA-434	Management and Corporate Responsibility	
BA-440	International Business and Management	
BA-481	Independent Study in Business Administration	
BA-482	Selected Topics: Business Administration	
BA-486	Internship in Business Administration	
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Marketing

Requirements for a Major in Business Administration, Concentration in Marketing

The Common Business Core together with four additional courses in the field of marketing chosen with the assistance of the advisor from the list that follows:

Common Business Core		(36 credits)
Lower Division		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
Upper Division		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Marketing Concentration Courses		(12 credits)
Select four of the following:		12
BA-406	Trends in Marketing	
BA-408	Directed Study: Business Administration	
BA-420	Marketing Research	
BA-422	Retailing	
BA-424	Advertising Management	
BA-426	Consumer Behavior	
BA-428	Business to Business Marketing	
BA-429	Integrated Marketing Communications	
BA-486	Internship in Business Administration	
BA-494	International Marketing	
Total Credits		48

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Minor

Admission Requirements for a Minor in Business Administration

Application to the department after completion of the prerequisite courses. For acceptance to the minor, students must complete the three prerequisite courses with a C (2.0) or better average.

Requirements for a Minor

Prerequisite courses		(9 credits)
CS-120	Microcomputer Applications	3
EC-150	Statistics	3
EC-110	Introduction to Microeconomics	3
or EC-120	Introduction to Macroeconomics	
Required courses		(18 credits)
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
Select four additional BA courses (may choose two of the following EC courses):		12
EC-205	Money, Banking, and Monetary Policy	
EC-301	Economic Development	
EC-307	International Finance	
EC-308	International Trade	
Total Credits		27

Communication

Department of Communication

The Department of Communication at Worcester State University promotes the critical understanding of communication in a culturally diverse and technological world. Grounded on methods of inquiry, the program engages students in the theory and practice of mass communications and intercultural communication. The department's goal is to educate students to assess the role of communication in society, and to be proficient communicators and competent users of current technologies. Representing diverse areas of expertise, the faculty emphasizes contemporary issues and media ethics from a global perspective.

Courses focused on media literacy, criticism, production and special topics, prepare students for careers in the field and for further study at the graduate level. Facilities include computer labs, a state-of-the-art television studio, editing suites, electronic field production video equipment and photographic dark rooms.

In addition to course work, students in their junior and senior year who have a GPA of 2.7 or higher are encouraged to apply for media internships with companies and nonprofit organizations that have a long-standing relationship with the Department. Majors have the opportunity to become members of WSTS-TV 11 and WSCW radio station. The department sponsors internships and photographic exhibits; in addition, many WSU students participate in off-campus communication-related competitions and activities.

- Communication Education Minor (p. 285)
- Communication Major (p. 285)
- Communication Major, Concentration in Advertising and Public Relations (p. 286)
- Communication Major, Concentration in Media Production (p. 287)
- Communication Minor (p. 290)
- COPACE BS/MSPC Degree Program (p. 290)

Faculty

Julian Berrian, Assistant Professor (2006), B.A. University of Maryland; M.F.A. Temple University

Donald F. Bullens, Associate Professor (1986), B.S. Ed., M.Ed. Worcester State College

Alta Carroll, Professor (1998), B.A. Texas A & M University; M.S. Columbia University; Ph.D. Purdue University

Carlos Fontes, Professor (1996), B.A. Escola Superior de Meios de Communicacao Social, Lisbon; M.A., Ph.D. University of Massachusetts

Julie D. Frechette, Department Chair, Professor (1999), B.A. University of New Hampshire; M.A., Ph.D. University of Massachusetts

Suzanne Gainer, Professor (2001), B.A. St. Vincent College; M.F.A. Rhode Island School of Design

Daniel S. Hunt, Assistant Professor (2013), B.A. University of Rhode Island; M.S. Boston University College of Communication; Ph.D. University of Connecticut

Emanuel E. Nneji, Associate Professor (2005), B.A. University of Nigeria; M.S. University of Lagos; Ph.D. University of South Carolina

Barbara Zang, Professor (2002), B.S. University of Missouri; M.A. University of Toledo; M.A. University of Missouri; Ph.D. Indiana University

CM-100 Intro to Mass Communication
LASC Categories: TLC, HBS
An integrated examination of the history, theory, structure, process, and effects of each of the mass media.
Fall and Spring and every year. 3 Credits

CM-101 Library Skills for Research
The course covers the basics of library research: search strategies and how to use both print and automated research tools.
Other or on demand. 1 Credit

CM-103 Survey of Radio and Television
LASC Categories: HBS, TLC
Perspectives on the development of radio and television technologies, programming, regulation, and economic support, and their impact.
Fall and Spring and every year. 3 Credits

CM-105 Media Writing
Prerequisites: CM-100
An introduction to various types of mass media writing, from print and broadcast to public relations, advertising, and online media.
Every year. 3 Credits

CM-106 Communications and the Internet
LASC Categories: TLC
Focuses on the social and educational implications of the Internet and the application of its various search tools as a means of communication.
Spring only and other or on demand. 3 Credits

CM-107 Journalism and Democracy
This course introduces students to the history of American journalism and the role of journalism in democratic and non-democratic societies.
3 Credits

CM-110 Public Speaking
LASC Categories: TLC
Essentials of speech production and speech writing for large and small groups. Classroom practice in delivering various types of speeches. [formerly ME 110 Speech)
Fall and Spring and every year. 3 Credits

CM-150 Photography I
LASC Categories: CA
Covers the basic theory and practice of thirty-five millimeter black and white photography, including camera handling, film processing, light meters, printing and picture content.
Fall and Spring and every year. 3 Credits

CM-151 Introduction to Digital Photography
LASC Categories: CA
Techniques and aesthetics of digital photography. Introduction to the operation of SLR digital cameras and the computer as digital darkroom.
Every year. 3 Credits

CM-152 Ecotourism & Photography in Costa Rica
LASC Categories: CA, GP
A multi-level, interdisciplinary photography course with travel to Costa Rica. This course covers basic digital photo techniques and the practices of sustainable eco-tourism. Additional fees apply.
3 Credits

CM-160 Introduction to Digital Imaging
This course introduces students to the procedures, techniques and concepts of basic digital imaging. In the course students learn to use the computer as a tool for visual image making.
3 Credits

CM-180 Introduction to Advertising
LASC Categories: HBS
An overview of the advertising including the historical and current roles of advertising in our economy, basic advertising concepts and methods, and social and cultural effects.
3 Credits

CM-191 Special Topics in Communication
An introductory level course in communication on current or specialized topics.
3 Credits

CM-193 Special Topics in Communication for First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. offered only as a First-Year Seminar.
Every year. 3 Credits

CM-199 Interpersonal Communication in Media
Study of the communications process as it relates to the production of material in various media, including video, audio, film.
Every year. 3 Credits

CM-200 Writing for Communication
LASC Categories: WAC
Prerequisites: EN-102
Development of writing, research, and critical thinking skills associated with the discipline of communication. Assignments focus on contemporary communication issues.
Every year. 3 Credits

CM-204 Analysis of News
This course introduces students to the conventions, ethical issues and the economics, political and socio-cultural forces that affect mainstream and alternative journalism today.
Every 2-3 years. 3 Credits

CM-205 Reporting for Media
This course refines interviewing skills and enables students to develop evidence from documentary sources to create stories for converging media.
Fall and Spring and every 2-3 years. 3 Credits

CM-206 Digital Storytelling
Prerequisites: CM-100
Use of personal narrative to construct stories using audio, still and video images, and music tracks in digital format.
Every year. 3 Credits

CM-210 Special Topics in Communication
This is a mid-level communication course focused on current specialized topics not covered by the department's curriculum.
3 Credits

CM-213 Gender and the Media
LASC Categories: HBS, TLC, DAC, WAC
Prerequisites: CM-100 and EN-102
This course will explore how difference is socially constructed along gender lines and will explore the intersections of gender, identity, power and media representation. [Cross-listed with WO/CM 213.]
Every 2-3 years. 3 Credits

CM-231 Photography II
Prerequisites: CM-150 or CM-151
Expands basic skills in camera craft, film and print processing and presentation. Instruction and practice in the zone system, theory and practice of advanced exposure and film development control. Emphasis on photographic composition and efficiency in designing purposeful photographic statements.
Fall and Spring and every year. 3 Credits

CM-240 Principles of Public Relations Practices
LASC Categories: HBS
Prerequisites: CM-100
An overview of public relations principles in business, politics, and society.
3 Credits

CM-241 Understanding Movies
LASC Categories: CA, TLC
An introduction to the aesthetics and critical theories of film as an artistic medium of communication through critical observation of classic and contemporary movies.
Other or on demand. 3 Credits

CM-242 Understanding Video Games
LASC Categories: CA, TLC
An introduction to the interdisciplinary study of video games as texts through an examination of their cultural, educational, and social functions in contemporary settings.
Every year. 3 Credits

CM-244 Graphic Design
Through hands on projects, students will learn formal elements of design, principles of typography, idea generation, and issues of responsible design as applied to print media.
Every year. 3 Credits

CM-250 Music of the Cinema:Spectacle, Splendor, and Spielberg
LASC Categories: CA, TLC
An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film. [Cross-listed with MU-250.]
Fall and Spring and every 2-3 years. 3 Credits

CM-259 Television Production
LASC Categories: CA
Basics of studio production including visualization and sequencing of short scripts, sound, graphics, lighting, and technical direction.
Every 2-3 years. 3 Credits

CM-260 Introduction to Video
LASC Categories: CA
A beginning course in video program production, using lightweight and portable equipment.
Fall and Spring and every year. 3 Credits

CM-268 Journalism: Feature Writing
Prerequisites: EN-102
Provides advanced training in finding, researching, developing, and writing feature stories for newspapers and magazines. [Cross-listed with EN-268.]
3 Credits

CM-270 Journalism: Editing
Prerequisites: EN-102
Training in copy selection, copy editing, story placement, headline writing, layout, and use of style books. [Cross-listed with EN-270.]
Every 2-3 years. 3 Credits

CM-271 Media and Globalization
This course examines the emergence of global media and its impact on the development of a global world.
Every 2-3 years. 3 Credits

CM-272 News Reporting and Writing
Prerequisites: EN-102 and CM-107
Includes fundamentals of news judgement, events coverage, sourcing, interviewing, writing on deadline, fact checking and basic editing. [Cross-listed with EN-272.]
Every year. 3 Credits

CM-285 History of Photography
LASC Categories: CA, TLC
The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with AR-285.]
Every 2-3 years. 3 Credits

CM-301 Communication Theory
Prerequisites: CM-100
Examines the nature and origins of symbol systems, the make up of audiences, the effects of mass media, and concomitant research.
Other or on demand. 3 Credits

CM-305 Media for Nonprofits
Prerequisites: CM-100.CM-105
This course covers the writing, research, planning and problem solving necessary to provide media services for a non-profit client.
Every 2-3 years. 3 Credits

CM-315 Social Media
LASC Categories: CA, TLC
Prerequisites: CM-100
This course explores the historical and societal influences on the development of social media through conceptual and practical applications.
3 Credits

CM-340 Public Relations Strategy
Prerequisites: CM-240
Case study approach to public relations practices, problems, opportunities, and application to practical situations.
Every 2-3 years. 3 Credits

CM-344 Graphic Design II
Prerequisites: CM-244
The course builds upon the foundations of design covered in Graphic Design I, with emphasis on critical thinking, visual problem solving and the use of text and image.
Every year. 3 Credits

CM-345 Media and Democracy
Prerequisites: CM-100
This course aims to develop an understanding of democracy's requirements and the role of the media in relation to democracy.
3 Credits

CM-350 Intercultural Communication
Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality, politics and economics.
3 Credits

CM-351 News Reporting and Writing II
Prerequisites: CM-272 or EN-272
Focuses on using documentary evidence in reporting. Students select a reporting specialty area such as sports, business or higher education. [Cross-listed with EN-351.]
Every 2-3 years. 3 Credits

CM-352 Practicum in Journalism
Prerequisites: CM-270 and CM-272
Workshop in which students report, write and edit the online college news magazine. Participate in all aspects of publication. [Cross-listed with EN-352.]
Every 2-3 years. 3 Credits

CM-353 Narrative Journalism
Prerequisites: CM-272 or EN-272
Students analyze and create in depth journalistic features and nonfiction stories that blend reporting with techniques of fictional storytelling. [Cross-listed with EN-353.]
Every 2-3 years. 3 Credits

CM-354 Opinion Writing
Prerequisites: CM-272 or EN-272
Students analyze and practice writing op-eds and other opinion pieces. Learn to write commentary that is publication ready. [Cross-listed with EN-354.]
Every 2-3 years. 3 Credits

CM-359 Documentary Production
Prerequisites: CM-260
This course engages students in a semester-long production of documentary and introduces key concepts of documentary theory.
Every 2-3 years. 3 Credits

CM-360 Television Production II
LASC Categories: CA
Prerequisites: CM-259 or CM-260
The student will gain experience in the areas of electronic videotape editing, technology of television engineering, creative video, remote production, and other advanced techniques. Primary emphasis is on the production of programs utilizing advanced techniques.
Every year. 3 Credits

CM-363 Visual Media Literacy
Prerequisites: CM-100
An introduction to principles of visual media literacy and their application in media production and perception.
3 Credits

CM-366 Scriptwriting
Prerequisites: CM-100
Creating scripted material for the electronic media. All types, styles, and formats will be covered.
Every 2-3 years. 3 Credits

CM-370 Advertising Production
Prerequisites: CM-100 and CM-180
Applied skills in advertising including the creation of advertisements in different media, advertising strategies, media schedules and campaign plans.
Other or on demand. 3 Credits

CM-384 Media Criticism
LASC Categories: HBS, TLC, DAC, WAC
Prerequisites: CM-100 and EN-102
Evaluation and analysis of film, television, theatre, and radio performances, development of intelligent, ethical standards of judgment.
Every year. 3 Credits

CM-390 Alternative Communication
Prerequisites: CM-103
This course introduces students to the theory and practice of alternative communication and its relationship with culture and politics. [Cross-listed with WO/CM-390.]
Every 2-3 years. 3 Credits

CM-396 Video Editing
LASC Categories: CA
Prerequisites: CM-259 or CM-260
The principles and procedures of editing video using computer-based, non-linear editing techniques and equipment. Students will produce short edited programs.
Fall and Spring and other or on demand. 3 Credits

CM-400 Advertising and Public Relations Research
LASC Categories: HBS
Prerequisites: CM-100, CM-180 and CM-240.
The course concentrates on the uses and applications of research in advertising and public relations situations.
Every 2-3 years. 3 Credits

CM-404 Independent Study: Media
Prerequisites: CM-100
Permits advanced students to investigate topic of special interest through research or production of a project. Periodic consultations with advisor.
Fall and Spring and every year. 1-6 Credits

CM-405 Mass Communication Research
LASC Categories: HBS, WAC
Prerequisites: EN-102.
Survey of methods and applications of research in media fields, including advertising, public relations, journalism, new media and political communication.
Every year. 3 Credits

CM-408 Directed Study: Communication
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
1-3 Credits

CM-410 Seminar: Topics in Communication
This course engages students in advanced examination of emerging communication topics and of topics in a faculty's area of expertise.
Spring only and other or on demand. 3 Credits

CM-416 Media Law and Ethics
Prerequisites: CM-272 or EN-272
An overview of the US legal and justice systems and an examination of ethical issues in mass media. [Cross-listed with EN-416.]
Every 2-3 years. 3 Credits

CM-435 Media Internship
Prerequisite: Two relevant communication courses and consent of department provides opportunity for advanced students to increase experience through internship with sponsoring community organization, institution, or business under appropriate supervision.
Fall and Spring and every year. 3-12 Credits

CM-450 Senior Communication Capstone
Prerequisites: CM-100, CM-110, CM-105 or CM-200 and CM-363 or CM-384.
Course allows students to reflect upon and document culminating experiences while nearing the end of their major coursework.
Every year. 3 Credits

Communication Education Minor

Requirements for a Minor in Communication Education

CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
WO/CM-350	Intercultural Communicatons	3
CM-384	Media Criticism	3
or CM-363	Visual Media Literacy	
Select any 2 electives in Communication		6
Total Credits		18

Communication Major

Requirements for a Major in Communication

39 credits for the Public Communication concentration and 39 credits for the concentration in Media Production.

Core Courses		(21 credits)
CM-100	Intro to Mass Communication	3
CM-105	Media Writing	3
or CM-200	Writing for Communication	
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Select one of the following:		3
WO/CM-213	Gender and the Media	
WO/CM-350	Intercultural Communicatons	
WO/CM-390	Alternative Communication	
Elective Courses		(18 credits)
Select 18 credits in Communication		18
Total Credits		39

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Sample Timetable for Completion of Degree Communication, Generalist

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
CM-100	Intro to Mass Communication	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
CM-110	Public Speaking	3
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	15
Year Two		
Semester Three		
CM-105	Media Writing	3
SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	16
Semester Four		
CM-213	Gender and the Media	3
SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15
Year Three		
Semester Five		
CM-363	Visual Media Literacy	3
SELECT	CM Major Elective	3
LASC	LASC Elective (HBS) (p. 56)	3

LASC	LASC Elective (CA) (p. 50)	3
SELECT	General Elective	3
	Credits	15

Semester Six

CM-384	Media Criticism	3
SELECT	CM Major Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Year Four

Semester Seven

CM-435	Media Internship	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Semester Eight

CM-450	Senior Communication Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Major, Concentration in Advertising and Public Relations

Requirements for the Concentration in Advertising and Public Relations

Core Courses		(18 credits)
CM-100	Intro to Mass Communication	3
CM-105	Media Writing	3
or CM-200	Writing for Communication	
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Required Courses for Concentration		(18 credits)

In addition to the six core courses, students will have to complete the following:

CM-180	Introduction to Advertising	3
CM-240	Principles of Public Relations Practices	3
CM-340	Public Relations Strategy	3
or CM-370	Advertising Production	
CM-400	Advertising and Public Relations Research	3
or CM-405	Mass Communication Research	
Select 6 credits of Elective Courses in Communication		6
Total Credits		36

Sample Timetable for Completion of Degree Communication/ Concentration in Advertising and Public Relations

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
LASC	LASC Elective (QR) (p. 61)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
CM-105 or CM-200	Media Writing or Writing for Communication	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15

Year Two

Semester Three

CM-180	Introduction to Advertising [1]	3
CM-240	Principles of Public Relations Practices [1]	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	16

Semester Four

Select one of the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-390	Alternative Communication	
SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	15

Year Three

Semester Five

CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15

Semester Six

CM-340	Public Relations Strategy [2]	3
CM-370	Advertising Production [2]	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Year Four

Semester Seven

CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-400	Advertising and Public Relations Research [3]	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Semester Eight

CM-400 or CM-405	Advertising and Public Relations Research [3] or Mass Communication Research	3
SELECT	CM Journalism Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

[1] Taught each Fall semester

[2] Taught each Spring Semester

[3] Taught every third semester

Once LASC requirements are satisfied, students may select general requirements.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Major, Concentration in Media Production

Requirements for the Concentration in Media Production

Core Courses		(18 credits)
CM-100	Intro to Mass Communication	3
CM-105 or CM-200	Media Writing Writing for Communication	3
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Tracks		(21 credits)
In addition to the six core courses, select one of the following tracks:		21

Track A: Print Media

CM-150	Photography I	
or CM-151	Introduction to Digital Photography	
CM-160	Introduction to Digital Imaging	
CM-231	Photography II	
CM-244	Graphic Design	
Select 9 credits of Elective Courses in Communication		
Track B: Broadcast Media		
CM-259	Television Production	
CM-260	Introduction to Video	
CM-366	Scriptwriting	
CM-396	Video Editing	
Select 9 credits of Elective Courses in Communication		
Total Credits		39

- Track A: Print Media (p. 288)
- Track B: Broadcast Media (p. 289)

Sample Timetable for Completion of Degree Communication/ Concentration Media Production A: Print Media

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
CM-100	Intro to Mass Communication	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
CM-150 or CM-200	Photography I or Writing for Communication	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Year Two		
Semester Three		
CM-110	Public Speaking	3
CM-150 or CM-151	Photography I or Introduction to Digital Photography	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	16
Semester Four		
CM-231	Photography II	3
CM-363	Visual Media Literacy	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Year Three		
Semester Five		
CM-160	Introduction to Digital Imaging	3
Select one of the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-390	Alternative Communication	
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (CA) (p. 50)	3
SELECT	General Elective	3
	Credits	15
Semester Six		
CM-244	Graphic Design	3
CM-384	Media Criticism	3
LASC	LASC Elective (GP) (p. 54)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
CM-450	Senior Communication Capstone	3
SELECT	CM Elective or Internship	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
SELECT	CM Elective or Internship	3
SELECT	CM Elective	3

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Suggested Timetable for Completion of Degree Communication/Concentration In Broadcast Media

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
CM-105	Media Writing	3
CM-241	Understanding Movies [1]	3
LASC	LASC Elective (QR) (p. 61)	3
	Credits	15
Year Two		
Semester Three		
CM-259 or CM-260	Television Production or Introduction to Video	3
CM-363	Visual Media Literacy	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	16
Semester Four		
CM-259 or CM-260	Television Production or Introduction to Video	3
CM-366	Scriptwriting	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15
Year Three		
Semester Five		
CM-384	Media Criticism	3
CM-396	Video Editing	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Semester Six		
CM-359	Documentary Production [1]	3
CM-435	Media Internship [1]	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
CM-360	Television Production II	3
Select one of the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-450	Senior Communication Capstone	3
CM-390	Alternative Communication	
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
CM-404	Independent Study: Media [1]	3
CM	Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

SELECT	General Elective	3
	Credits	15
	Total Credits	121

[1] Recommended Electives

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Minor

Requirements for a Minor in Communication

CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
Select 4 electives in Communication		12
Total Credits		18

COPACE BS/MSPC Degree Program

Worcester State University/Clark University School of Professional Studies MSPC Degree Program

Through a COPACE cooperative program between Worcester State University and Clark University, qualified Communication majors and minors during their senior year can work towards a Master of Science in Professional Communication, while concurrently completing their baccalaureate degree.

Criminal Justice

Department of Criminal Justice

- Criminal Justice Major (p. 296)
- Criminal Justice Minor (p. 298)

Faculty

Tina R. Adams, Assistant Professor (2013), B.A. College of the Holy Cross; M.A., Ph.D. California School of Professional Psychology

Robert A. Brooks, Professor (2004), B.M. Wayne State University; M.A. Antioch University, Los Angeles; J.D. University of Detroit Law School; Ph.D. American University

Aimee Delaney, Assistant Professor (2013), B.A., M.A., C.A.G.S. (Domestic Violence) University of Massachusetts, Lowell; Ph.D. University of New Hampshire

Hye-Sun Kim, Assistant Professor (2010), B.A. Dongguk University, South Korea; M.A. Ewha Women's University, South Korea; M.A. John Jay College of Criminal Justice; Ph.D. Indiana University of Pennsylvania

Penny Martin, Associate Professor (2003), B.S. Weber State College, Utah; M.A. Humboldt State University; Ph.D. University of Miami

Stephen A. Morreale, Department Chair, Associate Professor (2007), B.S. University of Massachusetts, Boston; M.P.A. Golden Gate University; D.P.A. Nova Southeastern University

Francis G. Olive III, Assistant Professor (2016), B.S. Our Lady of the Elms College; M.C.S.W. Fordham University; Ph.D. University of New Haven

James M. Silver, Assistant Professor (2016), B.A. Notre Dame University; J.D. Harvard University; Ph.D. University of Massachusetts, Lowell

John R. Tahiliani, Associate Professor (2008), B.A. King's College; M.A., Ph.D. Washington State University

CJ-101 Introduction to Criminal Justice
A survey of the American Criminal Justice System as a socio- political institution. The police, criminal courts, and correctional and rehabilitative endeavors will be analyzed within the framework of empirical research from the perspectives of the social sciences. Required of all Freshmen in the Criminal Justice major.
Every year. 3 Credits

CJ-102 Introduction to Corrections
Prerequisites: CJ-101
An in-depth examination of the American Correctional System. Traditional punitive measures will be analyzed in relation to current reintegration alternatives.
Every year. 3 Credits

CJ-111 Law Enforcement and Society
Prerequisites: CJ-101
The structure and function of law enforcement agencies in contemporary society will be analyzed in their sociological context. Particular emphasis will be placed on the role of the police within the framework of the Criminal Justice System.
Every year. 3 Credits

CJ-193 Special Topics for First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

CJ-203 Theories of Crime
Prerequisites: CJ-101
An exploration of prominent theories of crime causation, ranging from biological, psychological, sociological, and cultural explanations. Theories are compared and contrasted and implications are discussed as foundations for criminal justice system policy.
Every year. 3 Credits

CJ-205 American Judicial System
Prerequisites: CJ-101
An examination of the development of law and the American legal system. The problems related to the meaning and uses of law: the organizational hierarchy of the courts: and the role of the courts in the criminal justice systems.
3 Credits

CJ-211 Victimology
Prerequisites: CJ-101
Criminal-victim relationships, with emphasis on victim-precipitated crimes and compensation to the victims.
Every 2-3 years. 3 Credits

CJ-215 Art Crimes
LASC Categories: TLC, HBS
This course explores a variety of criminal offenses involving the production, consumption, distribution, and display of art, including graffiti/street art, forgery, theft, vandalism, rights infringement, and indecent and politically subversive art. The course examines these offenses from an interdisciplinary perspective, including law, criminology, aesthetics, economics, and cultural studies. Art crimes are examined from the international level to the local one. (This course does not count as a Criminal Justice elective for Criminal Justice majors.)
3 Credits

CJ-216 Cybercrime
Prerequisites: CJ-101 and CJ-111 and CJ-205
Cybercrime has grown in visibility and importance during the last two decades. There is growing public interest in cybercrime and idnetity theft and its consequences for businesses and individuals, only scant attention has been given to investigation and understanding of this crime. The focus of this course is to introduce students with the technical, social and legal aspects of cybercrime while exposing students to theories tools and approaches to preventing and investigation of Cybercrime.
Every 2-3 years. 3 Credits

CJ-250 Quantifying Crime
LASC Categories: QAC
Prerequisites: Pass accuplacer with a code 3 or above.
Students are provided with an overview of statistics used in criminal justice and criminology. The course covers topics including constructing testable research questions in the study of crime, organizing data, applying appropriate statistical tests, and interpreting results. This course also teaches student how to evaluate government data, technical reports, and empirical studies which summarize criminal justice data. Specific topics may include measuring crime, calculating crime hot spots, and crime mapping.
Other or on demand and every 2-3 years. 3 Credits

CJ-301 Juvenile Procedure
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An examination of the underlying philosophy of juvenile justice and procedures used to process a juvenile alleged to be delinquent through the juvenile justice system. The course will focus on the differences between juvenile procedure and adult criminal procedure by examing recent court decisions and statutory law pertaining to juveniles.
3 Credits

CJ-302 Criminal Law
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ102, CJ 205.
The function of criminal law and its relationship to various criminal offenses. including crimes against persons and crimes against property.
3 Credits

CJ-303 Patterns of Criminality
The U.S. Department of Justice Index Crimes will be studied along with other crimes; which will be selected on the basis of their contemporary administrative significance and their effect on the criminal justice system in particular.
3 Credits

CJ-305 Principles of Evidence and Proof
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
The study of the different types of evidence, relevance, the hearsay rule and its exceptions, impeachment and cross- examination and privileged communications.
3 Credits

CJ-306 Contemporary Problems in Corrections
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An intensive analysis of selected problems in institutional and community corrections.
3 Credits

CJ-307 Contemporary Problems in Law Enforcement
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An intensive analysis of selected problems in American law enforcement and police-community relations. A major research paper is required.
3 Credits

CJ-310 Organized and White Collar Crime
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
The methods through which organized crime influences and, in many instances, controls entire communities. Traditional types of crime heavily influenced by organized crime, such as loan sharking and gambling, will be analyzed in an effort to demonstrate the basis of power and wealth of organized crime in the United States.
3 Credits

CJ-312 Women and the Law
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An examination of the female and her involvement with the legal processes in the United States. Attention will be focused on the female as the offender and as the victim. Analysis of the various theoretical approaches to understanding the female offender will be presente in addition to an exploration of the recent literature on the female and the criminal justice system.
3 Credits

CJ-314 Seminar on Offender Rehabilitation
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
The "nothing works" doctrine generated by the controversial Martinson report has resulted in considerable confusion regarding the effectiveness of corrections programs designed to elicit specific behavioral changes on the part of the correctional client. This course will thoroughly examine the debate surrounding the "nothing works" doctrine anD present those methods of rehabilitation that have proven effective in the treatment of offenders. Probation, parole and programs for the incarcerated offender will be thE primary focus of this course.
3 Credits

CJ-317 Evolution of American Law Enforcement
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
A critical analysis of the contemporary American law enforcement establishment in relation to the evolutionary forces that have contributed to its development. Excepting modern technology, the law enforcement function tends to run in predictable cycles. Traditional in origin, these cyclical phenomena may be observed in the patterns of older societies. Reflections of the past are deemed vital to a more objective and well-rounded perception of current issues.
3 Credits

CJ-320 Criminal Procedure Fourth Amendment Rights of the Accused
Prerequisites: CJ-205.
A study of the basic constitutional rights associated with the investigation, prosecution, and trial of criminal cases, and how the U.S. Supreme Court and other appellate courts have interpreted those rights. The course focuses on law enforcement practices including arrests, lineups, interrogations, searches and seizures, and on court processes including pre-trial proceedings, trial, and sentencing.
Other or on demand and every 2-3 years. 3 Credits

CJ-322 Gangs
This course will offer an in-depth study of gangs in the United States. Topics to be examined include various theories of gang formation, group dynamics, and individual factors associated with gang membership. Attention will also be given to the different types of gangs that exist. Given these dynamics, the final portion of the course will focus on prevention and intervention efforts aimed at reducing gang behavior.
3 Credits

CJ-323 Religion and Crime in Contemporary America
This course will serve as an introduction to issues related toreligion and the criminal justice system. Topics will include the religious origins of the legal and correctional systems, religion and contemporary law, religion in prison and corrections, hate crimes and terrorism.
3 Credits

CJ-324 Restorative Community Justice
Restorative Community Justice is based on a new vision of criminal justice that stresses offender reintegration through offender accountability. Rather than simply a legal violation, crime is viewed as a breach in the relationship between the offender and the victim, and also the offender and the community. To the greatest degree possible, resolution should rest in the hands of those most directly involved, with the state mediating the conflict. This course will explore the philosophy of restorative justice, and current practices of victim-offender mediation, where the offender is required to directly confront the perosn(s) harmed, and the victim is given a real voice. It will examine how offenses can beresolved in ways that are positive and constructive for victims, communities, and also for offenders. The student will develop an understanding of the basic tenets of restorative justice, and also knowledge of how this concept is being applied in criminal justice practices in the U.S.and internationally.
3 Credits

CJ-325 Capital Punishment
This course focuses on capital punishment law, particularly United States Supreme Court decisions addressing constitutional issues relevant to the death penalty. Students also will explore empirical, penological, political, and moral issues related to the death penalty and its administration.
3 Credits

CJ-327 Race, Ethnicity and Criminal Justice
Prerequisites: CJ-205
An examination of the issues of race and ethnicity which continue to affect all aspects of criminal justice in America. Whether as offenders, victims, or as persons working (or seeking to work) within the system, African Americans, Hispanics, and other minorities are treated differently than non-minorities. This course explores the core soncepts of race and ethnicity as they have developed in our culture, and examines the evidence for and against various forms of racism and discrimination in key institutions of the criminal justice system. The nature and status of constitutional, statutory, and other remedies are also explored.
3 Credits

CJ-329 Crime and the Media
The course will deal with issues related to the mass media and crime in society. The increasing importance of the mass media in shaping peoples perception of attitudes toward the criminal justice system will be focused on. Other topics will include the media as a cause and cure for crime, biases in the media coverage, the effects of the media on criminal proceedings and crime on television and films.
3 Credits

CJ-330 Criminal Justice Administration
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An examination of organizational theory and its applications within criminal justice agencies. Consideration of the principles of organization and methods adopted by progressive agencies to unsure effective criminal justice service to the community will be reviewed.
3 Credits

CJ-331 Research Methods in Criminal Justice
Prerequisites: CJ-101, CJ-201/CJ-111, CJ202/CJ-102, CJ-205.
An introduction to scientific methodology as related to criminal justice. The course will focus on the development of hypotheses, data collection, data analysis and hypothesis verification. Attention is also given to basic statistical techniques appropriate for criminal justice research.
Every year. 3 Credits

CJ-332 Homicide
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.
An in-depth discussion of the legal definitions of and rationalizations for homicide. The statistical aggregates of those occaisions will be considered in terms of demographic and ethno-cultural phenomena. The murder episode is examined within the context of morality.
3 Credits

CJ-333 Terrorism
Prerequisites: CJ-101, CJ-201/CJ-111, CJ-202/CJ-102.
This course will explore the development of terrorism as a form of crime. Topics to be studied include major terrorist groups and their strategies, tactics and targets, jurisdictional issues, anti- and counter-terrorist operations, federal law enforcement, and future trends in terrorism.
3 Credits

CJ-334 Drugs, Crime and Society
Prerequisites: CJ-101.
This course will present an overview of the problems of drug-related crime in contemporary society. Specific drug substances are discussed, as well as legal, cultural, and social factors in connection with drug law enforcement.
Every year. 3 Credits

CJ-335 Comparative Criminal Justice Systems
Prerequisites: CJ-205
Increasingly, practitioners in the American criminal justice systems are required to interact with their counterparts, as well as citizens from other national jurisdictions. Effective interaction, including cooperation and sharing, requires some understanding of how criminal justice is conceived and practiced in other parts of the world. This course examines and compares key institutions of the criminal justice systems in six model countries, two in Europe, two in Asia, one Islamic nation, and one from Latin America. We look not only at formal organizations in each country, but also at actual practices and how they compare with each other and the United States. To understand how differences and similarities have developed, we also learn something of the history, culture, political system and economic conditions of each model country.
3 Credits

CJ-337 Criminal Justice Ethics
Prerequisites: CJ-101
this course investigates the application of moral logic to problems in the field of Criminal Justice. Issues related to policing, criminal prosecution, and corrections will be studied. Students will be encouraged to induce general moral precepts and rules from the examination of particular situations and problems.
3 Credits

CJ-338 Issues in Contemporary Security
An overview of security systems applicable to contemporary industrial and commercial demands. Losses through physical, technological, and personnel hazards are viewed as preventable phenomena if vulnerabilities are recognized and ameliorative measures taken. Counter-measures will be weighed within the framework of loss criticality and cost of effectiveness.
Other or on demand. 3 Credits

CJ-339 Probation, Parole, and Community Corrections
This course will present an overview of correctional options in the community. It will challenge students to consider how sanctions for criminal offenders can be managed in the communitywithout unduly sacrificing community safety or the integrity of the justice system. Community corrections is a fluid and coninually changing field. The focus will be on main themes and trends in probation and parole. Specific attention will be given to the dual, and often conflicting, goals of community protection and positiveoffender change with which the practitioner is typically confronted, the types of policies and programs implemented to meet these goals, and their effectiveness.
3 Credits

CJ-340 Special Topics in Criminal Justice
An in-depth study of a limited or specialized area within the criminal Justice field. Course content will vary according to the area of specialization of the instructor and the interest of the students. May be repeated if course content differs.
3 Credits

CJ-352 Principles of Investigation
Prerequisites: CJ-101 and CJ-201/CJ-111.
This course provides students with a theoretical framework for the practice of investigation in both the private and public sectors. Various techniques and protocols for investigation will be explored including infractions and ethics investigations and background investigations. Students will link these methods to the collection of physical evidence, interpretation and preservation of data, rules of evidence, techniques of documentation, along with interview and interrogation approaches.
3 Credits

CJ-371 Strategic Planning
Prerequisites: CJ-101
This course is designed to acquaint students with general theories of planned change at the individual, organizational, and community levels. Special atention will be given to the need for employee involvement and collaboration in working toward organizational goals, with reference to concepts such as reinventing government and total quality management. The emphasis will be on applied theory. Students will be expected to develop their own ideas for change in the fields of policing, courts, or corrections. They would then be required to consider the resistances that would likely arise as their changes are introduced, and how they should best be dealt with, considering planned change theories from the course.
3 Credits

CJ-384 Adult Offenders: Case Studies
A critical, theoretical examination of adult offenders, especially those who are socially disadvantaged. This examination will be based largely upon the analysis of qualitative research studies that hav been done with adult offenders. Special attention is given to the case study method and to understanding adult offenders as individuals making choices within the constraints of larger political, economic, social and ideological structures.
3 Credits

CJ-385 Juvenile Offenders: Case Studies
A critical, theoretical examination of various types of juvenile offenders. This examination will be based largely upon the analysis of qualitative research studies that have been done with juveniles. Special attention is given to the case study method and to understanding juvenile offenders as individuals embedded within and influenced by numerous social structures.
3 Credits

CJ-398 Field Practicum in Criminal Justice
The field practicum class involves the student's participation in the day-to-day functions of a publicly funded criminal justice agency. The course is designed to provide students with an opportunity to translate the theoretically oriented classroom experience into practical application.
3-6 Credits

CJ-399 Independent Study in Criminal Justice
Individual research and independent study related to a particular aspect of criminal justice that is of special interest.
3-6 Credits

CJ-400 Criminal Justice Capstone
LASC Categories: CAP
Prerequisites: CJ-101, CJ-102/CJ-202, CJ-111/CJ-201, CJ-203/CJ-121, CJ-205, and CJ-331.
Provide students the opportunity to engage in a culminating experience in which they use critical thinking skills to analyze, integrate, and synthesize the knowledge gained in their major program of study. Students will apply that knowledge and critical thinking skills to the exploration of issues and concerns/problems of the profession in preparation of future employment and/or graduate education.
Every year. 3 Credits

CJ-408 Directed Study: Criminal Justice
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Other or on demand. 3 Credits

Criminal Justice Major

The Bachelor of Science degree in Criminal Justice is a 120 credit-hour program. It is an interdisciplinary major, predicated on a common core of the humanities, social sciences, mathematics, and physical sciences. The goal of the program is to develop in students an increased analytical awareness of the role of law enforcement agencies, courts, and correctional institutions in the criminal justice system. The curriculum includes course work to provide students with awareness of recent advances in human dynamics, civil rights legislation and information technology.

The course of study consists of an extensive overview of the criminal justice system and an intensive examination of each of the major components of the system. The program is designed to serve students who may elect to enter the criminal justice profession immediately upon graduation, students of the liberal arts without professional interest in criminal justice, and students who desire

to pursue graduate work. Criminal Justice majors are able to apply for an internship in a criminal justice related organization during their junior year.

To request an application form, please call the Admissions Office at 508-929-8040.

Requirements for a Major

39 credits in criminal justice, of which 21 must be completed at Worcester State University.

Major Core		(21 credits)
CJ-101	Introduction to Criminal Justice	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
CJ-203	Theories of Crime	3
CJ-205	American Judicial System	3
CJ-331	Research Methods in Criminal Justice	3
CJ-400	Criminal Justice Capstone	3
Criminal Justice Electives		(18 credits)
Select 18 credits		18
Total Credits		39

Sample Timeline for Completion of Degree: Criminal Justice

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
CJ-101	Introduction to Criminal Justice	3
MA-099	Developmental Mathematics (or higher based on Accuplacer score)	3
LASC	LASC Elective (CON) (p. 49)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (TLC) (p. 63)	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
LASC	LASC Elective (QR) (p. 61)	3
	Credits	15
Year Two		
Semester Three		
CJ-203	Theories of Crime	3
CJ-205	American Judicial System	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Semester Four		
CJ	Elective Course in Major	3
CJ	Elective Course in Major	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	16
Year Three		
Semester Five		
SELECT	CJ Elective	3
SELECT	CJ Elective	3
LASC	LASC Elective (NSP) (p. 59)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Six		
CJ-331	Research Methods in Criminal Justice	3
SELECT	CJ Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
CJ-400	Criminal Justice Capstone	3
SELECT	CJ Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
SELECT	CJ Elective	3
SELECT	General Elective	3

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Criminal Justice Minor

Requirements for a Minor

7 courses comprising 4 core courses and three electives.

Core Courses		(12 credits)
CJ-101	Introduction to Criminal Justice	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
CJ-205	American Judicial System	3
Criminal Justice Electives		(9 credits)
Select three courses		9
Total Credits		21

Students will need to obtain a Declaration of Major/Minor from the Registrar's Office and obtain signature of CJ Department Chair. Students seeking entry into the CJ minor must obtain the signature of the CJ Department Chair.

Economics

Department of Business Administration and Economics

The economics program is designed to help students understand the world they live in, analyze important social issues, and adapt to a changing economic climate.

- Economics Major (p. 302)
- Economics Minor (p. 305)

Faculty

William F. O'Brien, Jr, Professor (1997), B.S. Worcester State College; M.A., Ph.D. Northeastern University

Bonnie Orcutt, Professor (2003), B.S. Worcester State College; M.A., Ph.D. Clark University

Wei Pang Lee, Professor (1992), B.A. Soochow University, Taipei, Taiwan; M.B.A. Northwest Missouri State University; Ph.D. University of Georgia

Elizabeth J. Wark, Professor (2007), B.A. Mount Holyoke College; M.B.A. University of Massachusetts; M.A., Ph.D. Clark University

Janice G. Yee, Professor (2007), B.A. University of Massachusetts, Dartmouth; M.A., Ph.D. Clark University

BA courses that will count towards the major or minor in Economics

Students pursuing a major or minor in Economics may elect to use **ONE** of the following BA courses to count towards their electives in the EC major/minor that may also count within the electives of the BA minor. (Note: There are 15 credits of electives in the EC major, 12 credits of electives in the EC minor, and 12 credits of electives in the BA minor.)

BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

EC courses that will count towards the major in Economics and the minor in Business Administration

Students pursuing a major in Economics and a minor in Business Administration may use **ONE** of the following EC courses to count both within the 12 credits of elective courses for the BA minor AND within the 15 credits of electives for the EC major.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards the major in Business Administration and a minor in Economics

Students pursuing a major in Business Administration and a minor in Economics may use **TWO** of the following EC courses to count in both within the 12 credits of elective courses for the BA major AND within the 12 credits of electives for the EC Minor.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards the major in Business Administration

Students pursuing a major in Business Administration may use **TWO** of the following EC courses to count within the 12 credits of electives for the Business Administration major.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the International Business concentration

A maximum of two of the EC courses listed below may be used.

EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the Finance Concentration

EC-205	Money, Banking, and Monetary Policy	3
EC-307	International Finance	3

BA courses and EC courses that will count towards meeting the requirements of a double major in Business Administration and in Economics

Students pursuing a double major in Business Administration and Economics may use:

TWO of the following EC courses to count within the 12 credits of elective (concentration) courses for the BA major, and

ONE of the following BA courses to count within the 15 credits of elective courses for the EC major.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

EC-102 Consumer Economics
LASC Categories: ICW
An in-depth study of personal and family economics, obtaining income, buying wisely, consumer borrowing, saving, and financial investment; the consumer protection and consumer legislation movements will be specifically emphasized.
Every year. 3 Credits

EC-104 Personal Financial Planning
LASC Categories: ICW
An investigation of the major vehicles for personal savings; bonds, stocks, mutual funds, real estate, and retirement and estate planning.
Fall and Spring and every year. 3 Credits

EC-110 Introduction to Microeconomics
LASC Categories: HBS
An introduction to the operation of the American market system and to the behavior of its participants whether consumers, producers, the government, or other nations engaged in international trade with the United States.
Every year. 3 Credits

EC-120 Introduction to Macroeconomics
LASC Categories: HBS
An introduction to economic analysis with particular emphasis upon the national problems of achieving and maintaining full employment, general price stability, and growth of the American economy through time.
Every year. 3 Credits

EC-150 Statistics
LASC Categories: QR
Prerequisites: EC-110 or EC-120 and Accuplacer code of at least 4
Basic tools of statistical analysis appropriate to research in the social sciences; topics include measures of central tendency, hypothesis testing, time series, index numbers, regression, and correlation.
Every 2-3 years. 3 Credits

EC-193 First Year Seminar Economics
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

EC-200 Intermediate Macroeconomics
Prerequisites: EC-110 and EC-120
An intermediate analysis of the determination of the level and growth of national income and employment, special attention given to the problems of inflation and recession and to the national fiscal and monetary policies designed to maintain full employment and stable price levels.
Every year. 3 Credits

EC-201 Intermediate Microeconomics
Prerequisites: EC-110 and EC-120
An intermediate level treatment of the theory of market pricing in a private enterprise system as it affects the resource and output decision of firms and industries under various market structures and the behavior of consumers.
Spring only and every year. 3 Credits

EC-202 Introduction to Mathematical Economics
Prerequisites: EC-110, and EC-120 and MA-110 or MA-180 with a C- or above or Accuplacer code of 6.
A survey of some basic mathematical techniques appropriate to the anaylsis of economic models and application of economic theory.
Every 2-3 years. 3 Credits

EC-205 Money, Banking, and Monetary Policy
Prerequisites: EC-110 and EC-120
A study of the roles of money, depository institutions, and central bank monetary policy in maintaining stable growth of the American economy.
Every 2-3 years. 3 Credits

EC-206 Urban Economics
Prerequisites: EC-110 and EC-120
The theory and policy of the growth and development of metropolitan areas; some of the policy-related problems discussed are poverty, residential and commercial land use and traffic congestion.
Every 2-3 years. 3 Credits

EC-208 Economics of Health Care
LASC Categories: ICW, WAC
Prerequisites: EC-110 and EN-102
Introductory study of the health care industry of the United States; pricing of health care, manpower availability, alternative delivery systems, third party payments, and government role in planning, regulating, and financing health care.
Other or on demand. 3 Credits

EC-210 Current Economic Issues
Prerequisites: EC-110 EC-120
This course is designed to connect economic knowledge and theory acquired at the introductory level to current economic issues and policy. National and international topics of importance will be considered. For example, pollution, trends in productivity, profitability and distribution, debt and deficits, patterns of investment, trade, and globalization and the economic issues of race, gender and poverty may be covered.
Other or on demand. 3 Credits

EC-215 Labor Economics
Prerequisites: EC-110 EC-120
A study of the process of wage determination in a market economy, onsideration given to the evolution of union organization and collective bargaining affecting wages, hours, working conditions, and grievance procedures for labor.
Every year. 3 Credits

EC-301 Economic Development
Prerequisites: EC-110 and EC-120
A survey of contemporary economic theories concerning less developed countries; social, cultural, and political forces shaping the development of such countries are also investigated.
Other or on demand. 3 Credits

EC-304 Economics of the Environment
Prerequisites: EC-110 and EC-120
Methods of pollution control and the socio-economic problems caused by pollution, current research on ecology and economics, and the impact that limits on pollution may have on income and population growth.
Spring only and other or on demand. 3 Credits

EC-306 Introduction to Econometrics
Prerequisites: EC-110, EC-120 and MA-150 or EC-150
The application of statistical techniques to the verification of economic models and examination of economic problems.
Spring only and every 2-3 years. 3 Credits

EC-307 International Finance
Prerequisites: EC-110 and EC-120
Study of how international trade and investment is financed in a world of floating, fixed and managed exchange rate systems.
Fall and Spring. 3 Credits

EC-308 International Trade
LASC Categories: GP
Prerequisites: EC-110 and EC-120
Reasons why nations gain by spatial specialization and exchange with other countries. Analysis of the mechanism by which international equilibrium is restored. Study of trade and foreign exchange policies.
Every 2-3 years. 3 Credits

EC-309 Public Spending and Taxation
Prerequisites: EC-110 and EC-120
An analysis of government spending, revenue sharing, and taxation; includes the impact of government spending upon efficient use of resources and national growth.
Other or on demand. 3 Credits

EC-400 Independent Study in Economics
Prerequisites: EC-200 and EC-201.
For the student whose needs cannot be fully met by available offerings; actual arrangement to be made between student and professor; not intended for general enrollment; a limit of three credits can be acquired.
Fall and Spring and every year. 1-3 Credits

EC-402 Internship in Economics
Prerequisites: EC-200 and EC-201 or permission of instructor
Practical experience in economic analysis with industry and non-profit organizations and government agencies; internships may be of varying length.
Fall and Spring and every year. 1-12 Credits

EC-403 Selected Topics in Economics
Prerequisites: EC-200 and EC-201 or permission of instructor
Covers selected topics in economics of mutual interest to the student and faculty.
3 Credits

EC-408 Directed Study in Economics
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

EC-490 Capstone in Economics
LASC Categories: CAP
Prerequisites: EC-110 EC-120 EC-200 EC-201 or permission of instructor
Integrative capstone course in economics involving policy analysis and critical application of economic theories.
Every year. 3 Credits

Economics Major

The BS in Economics will provide each student with knowledge of current economic thought and will develop students' understanding of the role played by economic institutions in society. Having completed a thorough program integrating economic theory and practice, students will be prepared to effectively participate in society as informed citizens to promote social well-being. Students will be prepared to succeed in a wide array of positions in business, government, and nonprofit organizations and will be able to successfully pursue graduate work in economics and related fields, predominately at the Masters level. Qualified majors will have an opportunity for honors and advanced coursework, intensive faculty interactions, national and regional competitions and activities, and economic research.

Graduates with a BS in Economics will be able to:

- demonstrate the ability to present orally and in writing a coherent, logical economic argument grounded in economic theory.
- Read and assess articles on economic topics.
- Articulate orally and in writing the core economic principles, concepts and theories that form the foundation for economic analysis and economic research.
- Investigate economic issues by synthesizing, building, and using theories/models to predict the behavior of economic agents.
- Evaluate economic issues and real world problems through data analysis and the application of appropriate statistical techniques, quantitative and/or qualitative methods.

Omicron Delta Epsilon, the international honor society in economics, is available to outstanding students.

Requirements for a Major in Economics

33 credits with EC designation

EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EC-150	Statistics (or another acceptable statistics course)	3
EC-200	Intermediate Macroeconomics	3
EC-201	Intermediate Microeconomics	3
Select one of the following:		3
EC-202	Introduction to Mathematical Economics	
EC-306	Introduction to Econometrics (or a course in which calculus is a primary topic)	
The remaining 15 (or more) credits may be chosen from economics electives in accordance with special interests and career objectives		15
Total Credits		33

Students are encouraged to take an internship if their program permits.

Students pursuing a major in Economics and a minor in Business Administration may use one of the following EC courses to count both within the 12 credits of elective courses for the BA minor and within the 15 credits of electives for the EC major.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

Once LASC requirements are satisfied, students may select general requirements.

BA courses that will count towards the major or minor in Economics:

Students pursuing a major or minor in Economics may elect to use ONE of the following BA courses to count towards their electives in the EC major/minor that may also count within the electives of the BA minor. (Note: There are 15 credits of electives in the EC major, 12 credits of electives in the EC minor, and 12 credits of electives in the BA minor.)

BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3

EC courses that will count towards the major in Business Administration and a minor in Economics:

Students pursuing a major in Business Administration and a minor in Economics may use TWO of the following EC courses to count in both within the 12 credits of elective courses for the BA major AND within the 12 credits of electives for the EC Minor.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards the major in Business Administration:

Students pursuing a major in Business Administration may use TWO of the following EC courses to count within the 12 credits of electives for the General Business concentration.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the International Business concentration.

A maximum of two of the EC courses listed below may beused.

EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the Finance Concentration:

EC-205	Money, Banking, and Monetary Policy	3
EC-307	International Finance	3

BA courses and EC courses that will count towards meeting the requirements of a double major in Business Administration and in Economics:
Students pursuing a double major in Business Administration and Economics may use:

- TWO of the following EC courses to count within the 12 credits of elective (concentration) courses for the BA major, and
- ONE of the following BA courses to count within the 15 credits of elective courses for the EC major.

EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Sample Timeline for Completion of Degree: Economics (for All Students Entering in Fall 2012 or Later)

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (p. 53)	3
EN-101	English Composition I	3
EC-120	Introduction to Macroeconomics	3
EC-150	Statistics	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
EC-110	Introduction to Microeconomics	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Year Two		
Semester Three		
SELECT	Economics Elective (#1)	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (NSP) (p. 59)	4
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	16
Semester Four		
EC-202 or EC-306	Introduction to Mathematical Economics or Introduction to Econometrics	3
SELECT	Economics Elective (#2)	3
LASC	LASC Elective (NSP) (p. 59)	3-4
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (QR) (p. 61)	3
	Credits	15-16
Year Three		
Semester Five		
EC-201	Intermediate Microeconomics	3
SELECT	Economics Elective (#3)	3
SELECT	General Elective	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Six		
EC-200	Intermediate Macroeconomics	3
SELECT	Economics Elective (#4)	3
LASC [1]	LASC Elective (DAC) (p. 51)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
LASC/EC	Capstone course or Elective #5	3

LASC [1]	LASC Elective (WAC) (p. 66)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Semester Eight

SELECT	EC Capstone course or Elective #5	3
LASC [1]	LASC Elective (QLAC) (p. 60)	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121-122

[1] Students need 1 DAC, 1 WAC and 1 QLAC

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Economics Minor

The Minor in Economics provides students with an excellent background for work in business fields such as banking, insurance, finance and accounting. Combining an Economics Minor with a B.S. degree in Business Administration helps to give students an edge in the marketplace. The Minor in Economics is equally appropriate for work in the private section, in the not-for-profit section and in the public sector at the federal, state, or local level. The minor may also help to prepare students for careers in teaching, journalism, and law, as well as for admission to graduate programs in public policy, law, business, international relations, journalism and related fields.

Requirements for a Minor

EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
PLUS Any four additional Economics courses		12
Total Credits		18

English

Department of English

The principal objectives of the English program are to help students to communicate clearly, logically, and effectively; to use research methods intelligently; to analyze, interpret and enjoy literature; and to develop a perspective on the world that is informed by intensive study of literature and its critical methods. The program also seeks to familiarize students with the classics of world literature, emphasizing the major authors, works and literary movements which distinguish English and American literature. At the same time, the program seeks to introduce students to "alternative voices" in literature, voices that are new to the literary canon or that occupy a literary space outside of it. The intellectual growth of majors is carefully nurtured to ensure that they are prepared for diverse career paths, scholarly research, and success in graduate school. Moreover, reflecting the institution's historical mission, the English program provides guidance and support for future teachers of English.

The Writing Center

Worcester State University's Writing Center is located in Sullivan 306. Staffed by graduate assistants and peer tutors, the Writing Center's offerings include individual writing tutorials for undergraduate and graduate students; reference material and workshops to help candidates prepare for the Massachusetts Teacher Test; writing across the curriculum resource material for Worcester State University faculty; and online tutorials for a wide range of technology-based subjects.

The Writing Center is fully connected to the campus network and the World Wide Web. The Worcester State University OWL (Online Writing Lab), the Writing Center's online community, hosts a varied collection of reference materials useful for both the academic and business writer. In addition, faculty, students, and members of the greater Worcester community submit their work online and receive feedback and support within 72 hours.

Sessions with Writing Center staff can be arranged on an appointment, drop-in, or online basis, and all services are offered at no charge. For more information, visit the OWL at the following web address: www.worcester.edu/owl.

English Honor Society

Sigma Tau Delta, an international honor society in literature, is available to outstanding junior and senior English majors and minors.

Women's Studies

English majors may elect an interdisciplinary concentration in women's studies. They must complete the requirements for the standard English major. They must have 15 credits in women's studies courses, with the English courses among them counting toward the major. For more information, see the Women's Studies section (p. 114) of this catalog.

- English Major (p. 314)
- English Major, Concentration in Journalism (p. 315)
- English Major, Concentration in Writing (p. 316)
- English Minor (p. 317)
- Writing Minor (p. 317)

Faculty

Elizabeth Bidinger, Associate Professor (2007), A.B. University of Michigan; M.A. Boston University; Ph.D. University of Connecticut

Charles Cullum, Professor (2014), B.A. Penn State University; M.A., Ph.D. Temple University

Jacqueline Morrill, Instructor (2017), B.A., Worcester State College; M.F.A., Sarah Lawrence College

Matthew Ortoleva, Associate Professor (2011), B.A. Rhode Island College; M.A., Ph.D. University of Rhode Island

Dennis Quinn, Department Chair, Professor (1996), B.A. Worcester State College; M.A. Assumption College; Ph.D. University of Massachusetts

Josna E. Rege, Professor (2006), B.A. Harvard University; M.A., Ph.D. University of Massachusetts, Amherst

Jamie Remillard, Assistant Professor (2017), B.A., Ph.D., University of Rhode Island; M.F.A., Emerson College

Christina Santana, Assistant Professor (2016), B.A., M.A. University of Nevada, Reno; Ph.D. Arizona State University

MaryLynn Saul, Professor (1995), B.S., M.A., Ph.D. Ohio State

Hardeep Singh Sidhu, Assistant Professor (2016), B.A. Boston University; M.A., Ph.D. University of Rochester

Heather Treseler, Associate Professor (2011), B.A. Brown University; Ph.D. University of Notre Dame

Donald W. Vescio, Jr, Associate Professor (1998), A.B. State University of New York, Oswego; M.A. University of New Hampshire; Ph.D. University of Rochester

Charles Wasilko, Associate Professor (1970), A.B. Dickinson College; M.A. Harvard University

Cleve Wiese, Assistant Professor (2014), B.A. Rhodes College; M.A. New York University; Ph.D. State University of Texas, Austin

Karen Woods Weierman, Professor (2000), B.A. Georgetown University; Ph.D. University of Minnesota

Sharon R. Yang, Professor (1999), B.A. University of Massachusetts, Lowell; M.A. Clark University; Ph.D. University of Connecticut

EN-099 Developmental English
Concentration on language basics - spelling, vocabulary, grammar, usage - with practice in writing sentences and paragraphs. Carries developmental credit (not counted toward degree requirements.)
Every year. 3 Credits

EN-101 English Composition I
LASC Categories: WR1
Prerequisites: PLCMT-EN1
Students learn to address audience and purpose as they develop an effective writing process. Instruction and practice in the process of composing expository essays. Emphasis on planning, drafting, revising, and editing.(Required of all students unless exempted by the Languages and Literature Department.)
Fall and Spring and every year. 3 Credits

EN-102 English Composition II
LASC Categories: WR2
Prerequisites: EN-101
Focuses on formal academic discourse and research methods, providing a foundation for writing in academic disciplines. A continuation of EN101: English Composition I. Emphasis on critical thinking, stylistic analysis, argumentation, research and documentation. (Required of all students unless exempted by the Languages and Literature Department.)
Fall and Spring and every year. 3 Credits

EN-105 Introduction to Literature
LASC Categories: TLC
A critical introduction to the principal genres of literature: poetry, drama, and fiction.
Fall and Spring and every year. 3 Credits

EN-107 Journalism and Democracy
This course introduces students to the history of American journalism and the role of journalism in democratic and non-democratic societies. [Cross-listed with CM-107]
Every year. 3 Credits

EN-130 Ancient Classics of Western Literature
LASC Categories: TLC
Greek and Roman literary masterpieces in transition, including Homer, Greek tragedy, Plato, Virgil and Roman comedy and satire.
Every 2-3 years. 3 Credits

EN-131 Great Works of Western Literature: Medieval to Modern
Continental masterpieces of the present millennium in translation by such writers as Dante, Cervantes, Voltaire, Dostoevsky, Baudelaire, and Kafka.
Fall only and every year. 3 Credits

EN-132 World Literature
LASC Categories: GP, DAC, TLC
Representative poems, stories, plays, both ancient and modern, from Asia, Africa, and Latin America.
Fall and Spring and other or on demand. 3 Credits

EN-140 Introduction to Poetry
LASC Categories: TLC
Examination and appreciation of the techniques and types of poetry including the sonnet, the pastoral, the mock heroic, and the ode.
Fall and Spring and every year. 3 Credits

EN-145 Introduction to Drama
LASC Categories: TLC
Theories and development of tragedy and comedy; plays of Sophocles to Eugene O'Neill as illustrations of these and related genres.
Fall and Spring and every year. 3 Credits

EN-150 The Short Story
LASC Categories: TLC
Introduction to the art of the short story through analysis of representative works.
Every year. 3 Credits

EN-152 The Novelette
LASC Categories: TLC
The major practitioners of the novelette over the past century: Conrad, Mann, Kafka, Dostoyevsky, and others.
Every 2-3 years. 3 Credits

EN-156 Mythology
LASC Categories: TLC, DAC
Myths and legends of ancient Greece and Rome which form a part of the classical tradition in English literature.
Fall and Spring and every year. 3 Credits

EN-158 Science Fiction
LASC Categories: TLC
The nature and function of nineteenth and twentieth century science fiction literature: Wells, Verne, Asimov, Bradbury, and others.
Every 2-3 years. 3 Credits

EN-160 Literature of the Bible
LASC Categories: TLC
Biblical writings. Emphasis will be placed on the Old Testament.
Every 2-3 years. 3 Credits

EN-164 Fantasy, Faerie and Folk
LASC Categories: TLC
Recurrent themes, literary characteristics, and structure of folktales, faerie and fantasy.
Every 2-3 years. 3 Credits

EN-165 Oral Literature: the Art of Storytelling
LASC Categories: TLC, CA
An examination of representative types and stories from diverse cultures and of techniques and practices used by their storytellers.
Every 2-3 years. 3 Credits

EN-167 Literature and Human Rights
LASC Categories: GP, DAC
An analysis of international creative writing dealing with the subject of human rights. Resource persons from different fields will be utilized.
Every 2-3 years. 3 Credits

EN-168 Film and Literature
LASC Categories: CA, TLC, WAC
An examination of the fundamental, rhetorical techniques of film and literature to determine the similarities of and differences between the two forms of expression.
Every 2-3 years. 3 Credits

EN-169 Ethnic Literature in the U.S.
LASC Categories: USW, TLC, DAC
Study of ethnic literature in the U.S., focusing on African- American, Asian-American, Latino, and Native-American writers.
Fall and Spring. 3 Credits

EN-170 Search for Identity
LASC Categories: DAC, TLC
Understanding the nature and power of fiction, the relation between problems of individual identity, and the operation of the imagination.
Other or on demand. 3 Credits

EN-172 Women and Literature
LASC Categories: WAC, TLC, GP
Explores basic issues and problems in literature by and about women.
Every 2-3 years. 3 Credits

EN-174 Women Poets
LASC Categories: TLC
A close reading and analysis of poetry written by women from a historical as well as a contemporary feminist perspective.
Every 2-3 years. 3 Credits

EN-190 Special Readings in Literature
An introductory literature course responsive to current interests or controversies.
3 Credits

EN-193 First Year Seminar English
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

EN-202 Honors Composition
LASC Categories: WR2
Focuses on writing development for academic success and citizenship, emphasizing rhetorical analysis, information literacy, and academic and public discourse. Honors students only.
Every year. 3 Credits

EN-207 The Writer's Life
Students examine the role of the writer in society and map their own possible career paths as writers.
Every year. 3 Credits

EN-210 Survey of American Literature I
Prerequisites: EN-102
American literature, beginnings to the Civil War; colonial and federal periods and the transcendentalists.
Fall and Spring and every year. 3 Credits

EN-211 Survey of American Literature II
Prerequisites: EN-102
American literature since the Civil War; naturalism and realism.
Fall and Spring and every year. 3 Credits

EN-214 Introduction to Digital Humanities
LASC Categories: QAC, WAC
Prerequisites: EN-102 or EN-202
This course is an introduction to the use of digital technologies in the analysis, production, and reception of texts. Most of us already are digital scholars, as we read information electronically, collaborate online, and write texts using computers. This course addresses instances in which we create or use information that is uniquely keyed to digital technologies, such as developing visual representations of narrative, using artificial intelligence to assess writing, statistically analyzing poetry, or crowd-sourcing creative and academic writing. This course will explore the theoretical and practical implications of reading and writing in a digital age.
Other or on demand. 3 Credits

EN-220 Survey of English Literature I
Prerequisites: EN-102
The development of English literature from the beginnings to 1798. Required of all English majors.
Fall and Spring and every year. 3 Credits

EN-221 Survey of English Literature II
Prerequisites: EN-102
The development of English literature from 1798 to the present. Required of all English majors.
Fall and Spring and every year. 3 Credits

EN-230 Environmental Themes in Literature
This class explores environmental issues as presented in poetry, essays and novels, including such writers as Thoreau, Hemingway and Ann Tyler.
Every 2-3 years. 3 Credits

EN-240 Survey of Postcolonial and Transcultural Literature
LASC Categories: GP
Prerequisites: EN-102
Introduction to literatures in English from formerly colonized countries in Africa, Asia, and the Caribbean, and from the postcolonial diaspora.
Every year. 3 Credits

EN-250 Creative Thinking and Critical Writing
LASC Categories: TLC, WAC
Prerequisites: EN-102
This course promotes critical and creative thinking through exploring viewpoints of different professions, cultures and eras in various textual forms.
Every year. 3 Credits

EN-251 Advanced Expository Writing
Prerequisites: EN-102
Instruction and practice in writing expository essays. Analysis of selected readings on a common theme or subject area.
Fall and Spring and every 2-3 years. 3 Credits

EN-252 Technical Writing
LASC Categories: WAC
Prerequisites: EN-102
Focuses on how to write and produce basic documents, from research and progress reports to brochures and manuals.
Fall and Spring and every year. 3 Credits

EN-253 Business Communications
LASC Categories: WAC
Prerequisites: EN-102
A consideration of accepted business communication conventions: correspondence, memoranda, survey reports, proposals, interim reports and project reports.
Fall and Spring and every year. 3 Credits

EN-255 Methods of Literary Study
LASC Categories: TLC, WAC
Prerequisites: EN-102
Introduction to critical methods of interpreting literature through examination of works by major authors.
Fall and Spring and every year. 3 Credits

EN-256 Creative Writing: Fiction
LASC Categories: CA
Prerequisites: EN-102
An opportunity to develop the student's writing ability and critical sense; work of students and professional authors will be analyzed.
Every year. 3 Credits

EN-257 The Power of Memoir
LASC Categories: TLC, CA, WAC
Prerequisites: EN-102
Examines the craft and theory of memoir through wide-ranging readings and intensive practice in writing and workshopping personal narratives.
3 Credits

EN-258 Creative Writing: Nonfiction
LASC Categories: CA
Prerequisites: EN-102
A course focused on memoir and narrative journalism; students analyze and create short works of nonfiction.
Every 2-3 years. 3 Credits

EN-260 Creative Writing: Poetry I
LASC Categories: CA, TLC
Prerequisites: EN-102
Developing the student's skill in the creation of poetry; attention to contemporary trends in American poetry.
Every year. 3 Credits

EN-262 Creative Writing: Poetry II
LASC Categories: CA
Prerequisites: EN-102
Conversation with practicing poets; preparation of a small booklet of poems.
Every year. 3 Credits

EN-266 Journalism: Practice and Techniques
LASC Categories: WAC, TLC
Prerequisites: EN-102
Training in developing, reporting, writing and editing straight news, feature, profile, and interpretive stories.
Every year. 3 Credits

EN-267 Journalism: Advanced Newswriting
LASC Categories: WAC
Prerequisites: EN-102
Provides advanced training in the development and writing of straight news stories.
Every 2-3 years. 3 Credits

EN-268 Journalism: Feature Writing
Prerequisites: EN-102
Provides advanced training in finding, researching, developing, and writing feature stories for newspapers and magazines. [Cross-listed with CM-268]
Every 2-3 years. 3 Credits

EN-269 Journalism: Interpretive Reporting
Prerequisites: EN-102
Provides advanced training in developing and writing profiles and interpretive stories.
Other or on demand. 3 Credits

EN-270 Journalism: Editing
Prerequisites: EN-102
Training in copy selection, copy editing, story placement, headline writing, layout, and use of style books. [Cross-listed with CM-270]
Every 2-3 years. 3 Credits

EN-271 Journalism Workshop
LASC Categories: WAC
Prerequisites: EN 102.
Provides laboratory sessions in all aspects of journalism for advanced writers; emphasis on publication.
Every 2-3 years. 3 Credits

EN-272 News Reporting and Writing I
LASC Categories: ICW, USW, WAC
Prerequisites: EN-102 and EN-202 or EN-250
Includes fundamentals of news judgement, events coverage, sourcing, interviewing, writing on deadline, fact checking and basic editing.
Every year. 3 Credits

EN-275 Sportswriting
Prerequisites: EN-102
Introduces students to the journalistic art of sportswriting, reporting, and interviewing for various media.
Every year. 3 Credits

EN-281 Web Authoring and Publication
An introduction to web authoring and publication, with special emphasis on the conventions of digital discourse.
Every 2-3 years. 3 Credits

EN-300 History of the English Language
LASC Categories: TLC
Prerequisites: EN-102
A study of the origins of the English language from Old English through Middle English to the present.
Other or on demand. 3 Credits

EN-302 Medieval Literature
Ideas of medieval christianity, courtly love, and chivalric honor as they appear in lyric poetry, drama, and Arthurian romance.
Every 2-3 years. 3 Credits

EN-303 Arthurian Literature
LASC Categories: TLC
This course traces the development of the Arthurian legends from their Celtic origins up through the modern period.
Every 2-3 years. 3 Credits

EN-304 Witchcraft in Medieval and Renaissance Literature
LASC Categories: TLC
Prerequisites: EN-102
This course explores how Medieval and Renaissance literature on witchcraft addressed contemporary concerns.
Every 2-3 years. 3 Credits

EN-306 The Renaissance
LASC Categories: TLC
Prerequisites: EN-102
The non-dramatic literature of Tudor England; emphasis on More, Wyatt, Sidney, Spenser, the earlier works of Shakespeare, Donne and Bacon.
Every 2-3 years. 3 Credits

EN-308 17th Century Literature
Prerequisites: EN-102
Prose and poetry of the era with special attention to the major works of Jonson and Donne.
Every 2-3 years. 3 Credits

EN-310 18th Century Literature
Prerequisites: EN-102
The major figures of the Enlightenment with particular emphasis on satire: Dryden, Pope, Swift, Johnson, and Boswell.
Every 2-3 years. 3 Credits

EN-311 Young Adult Literature
Prerequisites: EN-102
Theoretical and critical approaches to classic and contemporary texts written for young adults aged pre-teen to late teen.
Every 2-3 years. 3 Credits

EN-312 The English Novel of the 18th Century
Prerequisites: EN-102
Purpose, range, and developments in the novel of the eighteenth century: Defoe, Richardson, Fielding, Smollett, Sterne, and others.
Every 2-3 years. 3 Credits

EN-314 The English Novel of the 19th Century
Prerequisites: EN-102
Representative nineteenth century novelists: Austen, Bronte, Dickens, Thackeray, Eliot, Hardy, Conrad, and others.
Every 2-3 years. 3 Credits

EN-316 The Modern British Novel
Prerequisites: EN-102
Selected works of major British novelists from 1900 through World War II: Joyce, Lawrence, Woolf, Forster and others.
Every 2-3 years. 3 Credits

EN-318 Romantic Literature
Prerequisites: EN-102
Poetry and prose with special emphasis on the poetry of Wordsworth, Coleridge, Shelley, Byron, and Keats.
Every 2-3 years. 3 Credits

EN-320 Victorian Literature
LASC Categories: TLC, WAC
Prerequisites: EN-102
Study of selected prose and poetry of the major writers of the Victorian period.
Fall and Spring and every 2-3 years. 3 Credits

EN-321 Romantic and Victorian Gothic
LASC Categories: TLC
Prerequisites: EN-102
This genre gives students insight into the important writers, texts, and issues of the Victorian and Romantic eras.
Every 2-3 years. 3 Credits

EN-324 Continental Novelists I
Prerequisites: EN-102
European novelists of the nineteenth and twentieth centuries including Dostoyevsky, Mann, Camus, and others.
Every 2-3 years. 3 Credits

EN-326 Continental Novelists II
An examination of later works by authors studied in Continental Novelists I.
Every 2-3 years. 3 Credits

EN-330 Modern Drama
Prerequisites: EN-102
The theories and development of realism, naturalism, expressionism, folk drama; representative plays from Ibsen to O'Neill.
Every 2-3 years. 3 Credits

EN-332 Contemporary Drama
Prerequisites: EN-102
The dramatic works and aesthetics of Beckett, Pinter, and other selected dramalists of the contemporary theatre.
Spring only and every 2-3 years. 3 Credits

EN-334 Modern Poetry
Prerequisites: EN-102
Close analysis of the development of British and American poetry from the late nineteenth century to World War II.
Every 2-3 years. 3 Credits

EN-336 Contemporary Poetry
Prerequisites: EN-102
Concentrates on poets whose major work was written after World War II: Special attention to authors presently writing and publishing.
Every 2-3 years. 3 Credits

EN-338 Contemporary Novel
Prerequisites: EN-102
American and English novels after World War II with emphasis on living novelists.
Every 2-3 years. 3 Credits

EN-340 20th Century Literature
Prerequisites: EN-102
A survey of the major trends in twentieth century poetry, drama, and fiction.
Every 2-3 years. 3 Credits

EN-341 Advanced Practices in Writing
Students gain advanced practices and skill in professional writing genres. Rotating topics and genres. Consent of instructor.
Every year. 3 Credits

EN-342 The American Novel I
Prerequisites: EN-102
The American novel from its origin to 1890; Brown, Cooper, Melville, Hawthorne, and others.
Every 2-3 years. 3 Credits

EN-344 The American Novel II
Prerequisites: EN-102
The American novelists from 1890 to World War II: Crane, Wolfe, Dreiser, Anderson, Hemingway, Steinbeck, and others.
Every 2-3 years. 3 Credits

EN-345 American Women Writers
LASC Categories: USW, DAC
Prerequisites: EN-102
The American woman as she is portrayed in fiction, non-fiction, and poetry.
Every 2-3 years. 3 Credits

EN-346 History of Literary Criticism
Prerequisites: EN-102
An historical introduction to speculation concerning the nature and function of literature: Selections from Plato to Frye.
Every 2-3 years. 3 Credits

EN-347 Studies in U.S. Ethnic Literature
LASC Categories: USW
Prerequisites: EN-102
Selected topics in U.S. ethnic literature, including thematic and comparative approaches,and in-depth studies of a single ethnic literature.
Every 2-3 years. 3 Credits

EN-348 Postcolonial Women's Writing
LASC Categories: GP
Prerequisites: EN-102
Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression.
Every 2-3 years. 3 Credits

EN-350 Chaucer
Prerequisites: EN-102
A study of the development of Chaucer's versatile art and writings as expressive of the later Middle Ages.
Every 2-3 years. 3 Credits

EN-351 News Reporting and Writing II
Prerequisites: EN-272
Focuses on using documenatry evidence in reporting. Students select a reporting specialty area such as sports, business or higher education. [Cross-listed with CM-351]
Every 2-3 years. 3 Credits

EN-352 Practicum in Journalism
LASC Categories: WAC
Prerequisites: EN-270 and EN-272
Workshop in which students report, write, and edit the online college news magazine. Participate in all aspects of publication. [Cross-listed with CM-352]
Alternating and every year. 3 Credits

EN-353 Narrative Journalism
LASC Categories: CA, WAC
Prerequisites: EN-272
Students analyze and create in-depth journalistic features and nonfiction stories that blend reporting with techniques of fictional storytelling. [Cross-listed with CM-353]
Every 2-3 years. 3 Credits

EN-354 Opinion Writing
LASC Categories: ICW, WAC
Prerequisites: EN-272
Students analyze and practice writing op-eds and other opinion pieces. Learn to write commentary that is publication ready. [Cross-listed with CM-354]
Every 2-3 years. 3 Credits

EN-360 Shakespeare I
Prerequisites: EN-102
Major plays. Required of all English majors.
Fall and Spring and every year. 3 Credits

EN-362 Shakespeare II
Prerequisites: EN-102
A continuation of EN360; includes the sonnets and less familiar plays.
Every 2-3 years. 3 Credits

EN-364 Elizabethan and Jacobean Drama
LASC Categories: WAC
Prerequisites: EN-102
A critical analysis of plays by the contemporaries of Shakespeare: Kyd, Marlowe, Greene, Johnson, Ford, Webster, and others.
Every 2-3 years. 3 Credits

EN-370 Antislavery Literature
LASC Categories: TLC, USW, DAC, WAC
Prerequisites: EN-102 or EN-202 or EN-250
This course traces the literary history of the antislavery movement in the Atlantic World: writing in a range of genres (journalism, history, fiction, poetry, drama, slave narratives), antislavery writers made a significant contribution to the campaigns to end the slave trade and slavery. While the Atlantic system of legal slavery ended in the nineteenth century, an even larger system of illegal slavery still exists, and so the course concludes by considering the work of twenty-first century antislavery writers and what they might learn from their predecessors. In other words, can we use literary history to make slavery history?
Every 2-3 years. 3 Credits

EN-380 Milton
Prerequisites: EN-102
A study of Milton's work from early poems to Paradise Lost, Paradise Regained, and Samson Agonistes; includes some prose pamphlets.
Every 2-3 years. 3 Credits

EN-382 English Theatre: 1660-1780
Prerequisites: EN-102
A survey of plays of the Restoration period and the eighteenth century; genres of comedy and tragedy.
Every 2-3 years. 3 Credits

EN-390 Irish Literary Revival
Prerequisites: EN-102
The Irish literary renaissance; the origins of the movement; includes Joyce, Yeats, Synge, O'Casey, Lady Gregory, and others.
Every 2-3 years. 3 Credits

EN-400 Seminar in English
Prerequisites: EN-102
Student presentations on individual figures and particular problems in literature.
Every year. 3 Credits

EN-408 Directed Study: English
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

EN-410 Writing Practicum
Prerequisites: EN-102
Training and practice in one-to-one assistance for students' writing for any course, stage, or specific need.
Fall and Spring and every year. 3-6 Credits

EN-411 Theory and Teaching of Writing
Prerequisites: EN-102
Every 2-3 years. 3 Credits

EN-415 Technology and the Teaching of Writing
Prerequisites: EN-102 and Permission of Instructor
An introduction to the use of computer and internet technologies in the teaching of writing.
Every 2-3 years. 3 Credits

EN-416 Media Law and Ethics
Prerequisites: EN-272 or CM-272
An overview of the U.S. legal and justice systems and an examination of ethical issues in mass media. [Cross-listed with EN-416]
Every 2-3 years. 3 Credits

EN-425 Independent Study in English
Prerequisites: EN-102
An opportunity for further study in a special field of interest under faculty supervision. Consent of instructor.
Fall and Spring and every year. 1-6 Credits

EN-426 Senior Seminar
LASC Categories: CAP
Prerequisites: EN-255
Course provides an option for seniors to fulfill their university capstone requirement in the discipline. Consent of instructor.
3 Credits

EN-450 Special Topics in English
Prerequisites: EN-102
Specific content will vary in response to particular student and faculty interests.
Fall and Spring and every year. 3 Credits

EN-475 Internship in English
Prerequisites: EN-102.
Provides majors the opportunity to gain practical experience in areas where they may apply acquired critical and writing skills. Consent of instructor
Fall and Spring and every year. 3-6 Credits

JO-101 Introduction to Journalism
LASC Categories: ICW, USW
Includes fundamentals of news judgement, events coverage, sourcing, interviewing, writing on deadline, fact checking and basic editing.
3 Credits

JO-201 Multimedia Journalism
LASC Categories: WAC
Prerequisites: EN-101
Workshop in which students report, write, and edit the online college news magazine. Participate in all aspects of publication.
Alternating and every year. 3 Credits

English Major

Requirements for a Major

36 credits in English (exclusive of EN-101 and EN-102) which must include the following:

Required Courses		(15 credits)
EN-210	Survey of American Literature I	3
or EN-211	Survey of American Literature II	
EN-220	Survey of English Literature I	3
EN-221	Survey of English Literature II	3
EN-255	Methods of Literary Study	3
EN-360	Shakespeare I	3
Electives		(21 credits)
Select 21 credits of Electives in English (including a minimum of 12 credits in 300 or 400 level literature courses)		21
Total Credits		36

Students declaring English as a major must demonstrate a competency in a foreign language at the basic level.

Sample Timetable for Completion of Degree: English

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
SELECT [1]	WL Beginning Language I (TLC)	3

LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
SELECT	WL Beginning Language II (GP)	3
EN 1XX+	EN Major Elective	3
LASC	LASC Elective (NSP) (p. 59)	3
	Credits	15
Year Two		
Semester Three		
EN-220	Survey of English Literature I	3
EN-255	Methods of Literary Study	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	16
Semester Four		
EN-221	Survey of English Literature II	3
SELECT	General Elective	3
EN-1XX+	EN Major Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	15
Year Three		
Semester Five		
EN-210 or EN-211	Survey of American Literature I or Survey of American Literature II	3
EN-3XX+	EN Major Elective	3
SELECT	General Elective	3
LASC	LASC Elective (p. 47)	3
SELECT	General Elective	3
	Credits	15
Semester Six		
EN-360	Shakespeare I	3
EN-3XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
EN-3XX+	EN Major Elective	3
EN-3XX+	EN Major Elective	3
EN-1XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
LASC/EN	Capstone	3
EN-1XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

English Major, Concentration in Journalism

Requirements for a Major in English, Concentration in Journalism

In addition to taking the required courses for the English major and two 300- or 400-level literature electives, students choosing the journalism concentration must take five journalism courses comprised of three required courses and two electives.

English Requirements		(15 credits)
EN-210	Survey of American Literature I	3
or EN-211	Survey of American Literature II	
EN-220	Survey of English Literature I	3
EN-221	Survey of English Literature II	3
EN-255	Methods of Literary Study	3
EN-360	Shakespeare I	3
Literature Electives		(3 credits)

Select two 300- or 400-level literature electives		3
Journalism Requirements		(9 credits)
EN-107	Journalism and Democracy	3
EN-272	News Reporting and Writing I	3
EN-416	Media Law and Ethics	3
Journalism Electives		(6 credits)
Select 2 electives from the following:		6
EN-268	Journalism: Feature Writing	
EN-270	Journalism: Editing	
EN-275	Sportswriting	
EN-351	News Reporting and Writing II	
EN-352	Practicum in Journalism	
EN-353	Narrative Journalism	
EN-354	Opinion Writing	
EN-475	Internship in English	
Total Credits		33

Prerequisites

The following are prerequisites for every journalism course except EN-270, which has only EN-102 (or equivalent LASC course) as a prerequisite:

EN-102	English Composition II (or equivalent LASC course)	
EN-107	Journalism and Democracy	
EN-272	News Reporting and Writing I	
Total Credits		0

English Major, Concentration in Writing

Requirements for a Major in English, Concentration in Writing

15 credits in writing courses (exclusive of EN-101 and EN-102) in addition to the 15 credits in Shakespeare (EN-360); surveys (EN-210 or EN-211; EN-220 and EN-221), and EN-255 required of all majors. The remaining 6 credits must be literature electives at the 300-level or above.

English Requirements		(15 credits)
EN-210	Survey of American Literature I	3
or EN-211	Survey of American Literature II	
EN-220	Survey of English Literature I	3
EN-221	Survey of English Literature II	3
EN-255	Methods of Literary Study	3
EN-360	Shakespeare I	3
Writing Courses		(15 credits)
Select 15 credit hours from the following:		15
EN-207	The Writer's Life	
EN-250	Creative Thinking and Critical Writing	
EN-251	Advanced Expository Writing	
EN-252	Technical Writing	
EN-253	Business Communications	
EN-256	Creative Writing: Fiction	
EN-258	Creative Writing: Nonfiction	
EN-260	Creative Writing: Poetry I	
EN-262	Creative Writing: Poetry II	
EN-266	Journalism: Practice and Techniques	
EN-267	Journalism: Advanced Newswriting	
EN-268	Journalism: Feature Writing	
EN-269	Journalism: Interpretive Reporting	
EN-270	Journalism: Editing	
EN-271	Journalism Workshop	
EN-272	News Reporting and Writing I	
EN-275	Sportswriting	
EN-281	Web Authoring and Publication	
EN-341	Advanced Practices in Writing	
EN-351	News Reporting and Writing II	
EN-352	Practicum in Journalism	
EN-353	Narrative Journalism	
EN-354	Opinion Writing	
EN-411	Theory and Teaching of Writing	
EN-415	Technology and the Teaching of Writing	
CM-366	Scriptwriting	
A 3-6 credit internship in writing, whether in English (EN-410 or EN-475) or other languages (FR-475 or SP-475)		
Total Credits		30

English Minor

Requirements for a Minor

18 credits in English (exclusive of EN-101 and EN-102) which must include the following:

Required Courses		(9 credits)
EN-210	Survey of American Literature I	3
or EN-211	Survey of American Literature II	
EN-220	Survey of English Literature I	3
EN-221	Survey of English Literature II	3
Electives		(9 credits)
Select 9 credits of English electives		9
Total Credits		18

Writing Minor

Requirements for a Minor in Writing

18 credits of writing beyond EN-101, EN-102, or EN-250.

Requirements		(9 credits)
EN-207	The Writer's Life	3
Select two 300-level writing courses		6
Electives		(9 credits)
Select 9 credits of writing courses offered by the department, including, but not limited to the following:		9
EN-251	Advanced Expository Writing	
EN-252	Technical Writing	
EN-253	Business Communications	
EN-256	Creative Writing: Fiction	
EN-258	Creative Writing: Nonfiction	
EN-260	Creative Writing: Poetry I	
EN-262	Creative Writing: Poetry II	
EN-266	Journalism: Practice and Techniques	
EN-267	Journalism: Advanced Newswriting	
EN-268	Journalism: Feature Writing	
EN-269	Journalism: Interpretive Reporting	
EN-270	Journalism: Editing	
EN-271	Journalism Workshop	
EN-272	News Reporting and Writing I	
EN-275	Sportswriting	
EN-281	Web Authoring and Publication	
EN-351	News Reporting and Writing II	
EN-352	Practicum in Journalism	
EN-353	Narrative Journalism	
EN-354	Opinion Writing	
Total Credits		18

Other writing courses offered in other departments may be counted toward the minor with the permission of the Chair of the English Department. Each student must take at least one course designated a professional writing course.

History

Department of History and Political Science

Our department explores the present and past through two distinct disciplines: History and Political Science. History is the study of the human past as it is constructed and interpreted with human artifacts, written evidence, and oral traditions. It requires empathy for people, respect for intelligent debate, and the skillful use of an evolving set of practices and tools. Political Science addresses questions about the organization and function of governments, public policies and political processes, systems, and political behavior. Political scientists use both humanistic and scientific perspectives and tools and a variety of methodological approaches to examine the processes, systems, and political dynamics of all countries and regions of the world. All History and Political Science courses emphasize critical reading, rigorous research, and strong oral and written communication skills. The History program encompasses a minor and a major, with optional concentrations in Public History or Foreign Service. The department also offers a minor in Political Science, a minor in Pre-Law, and a minor in Middle East Studies. History majors complete a capstone project through a seminar course, as an independent senior thesis, or by being accepted into the fall American Antiquarian Society Seminar. The department supports the Upsilon Rho chapter of Phi Alpha Theta, the National History Honor Society.

- History Major (p. 326)
- History Major, Concentration in Foreign Service (p. 327)
- History Major, Concentration in Public History (p. 328)
- History Minor (p. 329)
- Middle East Studies Minor (p. 329)

Faculty

Nathan Angelo, Assistant Professor (2016), B.A. Hofstra University; M.A. New York University and City University of New York; Ph.D. New School for Social Research

Joseph Preston Baratta, Associate Professor (1999), B.A. St. John's College; M.A., M.A.T., Ph.D. Boston University

Erika Briesacher, Assistant Professor (2012), B.A. Illinois Wesleyan University; M.A. Southern Illinois University, Edwardsville; Ph.D. Kent State University

Anthony Dell'Aera, Assistant Professor (2016), B.A. Trinity College; M.A., Ph.D. Brown University

Martin Fromm, Assistant Professor (2013), B.A. Brown University; M.A. Stanford University; Ph.D. Columbia University

Michael Gesin, Associate Professor (2007), B.A. Worcester State College; M.A., Ph.D. Brandeis University

Aldo V. Garcia Guevara, Department Chair/Sociology, Associate Professor (2006), B.A. University of North Carolina, Asheville; M.A., Ph.D. University of Texas, Austin

Charlotte Haller, Associate Professor (2004), B.A. Brown University; M.A., Ph.D. University of Wisconsin

Tona J. Hangen, Department Chair, Associate Professor (2008), B.S. Massachusetts Institute of Technology; Ph.D. Brandeis University

Peter Holloran, Professor (1999), A.B. Suffolk University; M.A., Ph.D. Boston University

Tanya Mears, Assistant Professor (2010), B.S. Tuskegee University; M.A., Ph.D. University of Massachusetts, Amherst

Alison K. Okuda, Assistant Professor (2017), B.A. University of California; M.Phil., Ph.D., New York University

Najib E. Saliba, Professor (1971), A.B. Miami University; M.A., Ph.D. University of Michigan

Robert W. Smith, Associate Professor (2007), B.A. Syracuse University; M.A., Ph.D. College of William and Mary

HI-103 World Civilization I
LASC Categories: GP, TLC
Surveys economic, social, political and intellectual developments of world civilizations and their inter-relationship from ancient times to 1500.
Fall and Spring and every year. 3 Credits

HI-104 World Civilization II
LASC Categories: GP, TLC
Surveys economic, social, political and intellectual development of world civilizations and their inter-relationship from 1500 to 1914.
Fall and Spring and every year. 3 Credits

HI-105 World Civilization III
LASC Categories: TLC, GP
Surveys economic, social, political, and intellectual development of world civilizations and their interrelationship from 1914 to the present.
Fall and Spring and every year. 3 Credits

HI-111 US History I
LASC Categories: USW, CON
From colonization through the Civil War era. A study of politics, society, economy, diplomacy, and culture in that period.
Fall and Spring and every year. 3 Credits

HI-112 US History II
LASC Categories: CON, USW
From the Civil War ers to the present. Topics include politics, society, economy, diplomacy, and culture in modern America.
Fall and Spring and every year. 3 Credits

HI-193 First Year Seminar History
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Fall only and every year. 3 Credits

HI-201 International Relations I
LASC Categories: USW, GP, WAC
Prerequisites: PO-101 and HI-103 or HI-104 and EN-102, EN-202, or EN-250.
Theory and practice of international security (realism and internationalism) and international political economy (liberalism and protectionism) in their historical context.
Fall only and every year. 3 Credits

HI-202 International Relations II Globalization
LASC Categories: USW, GP, WAC
Prerequisites: PO-101 or HI-103 or HI-104 and EN-102, EN-202 or EN-250
The promise and problems of globalization (spread of free market capitalism and political democracy).
Spring only and every year. 3 Credits

HI-203 The United States Since 1945
LASC Categories: USW, DAC, WAC
Prerequisites: EN-102, EN-202 or EN-250
Explains the history and culture of the United States since 1945.
Every 2-3 years. 3 Credits

HI-204 History of Science and Technology
LASC Categories: GP, TLC, WAC
Prerequisites: EN-102, EN-202 or EN-250
Progress of science since the Enlightenment, including applied science or technology from the 19th century. Complements History of Mathematics.
Every year. 3 Credits

HI-205 Native America
This survey covers the broad sweep of native American history and focuses on the encounter between American and European civilizations and how Native culture has adapted through the centuries.
Every 2-3 years. 3 Credits

HI-206 A History of Warfare
An examination of the rcle of war in conflict resolution, great battles which changed history, and the impact of technology on war.
Every 2-3 years. 3 Credits

HI-207 American West: Myth and Reality
The historic development of the West, its impact on the American character, and a study of how myths became accepted "fact."
Every 2-3 years. 3 Credits

HI-208 American Immigrant History
Survey of immigration. Topics such as old-world background, impact on the United States, nativism, cultural pluralism, religion, mobility, family and politics.
Every year. 3 Credits

HI-211 History of US Foreign Policy I
LASC Categories: USW
Prerequisites: HI-111 or HI-112
Colonial origins to the era of the Spanish American War. The sources and developments of United States foreign policy in that period.
Every 2-3 years. 3 Credits

HI-212 History of US Foreign Policy II
LASC Categories: USW
Prerequisites: HI-111 or HI-112
From 1900 to recent times: United States foreign policy traditions and the challenges of great power status. [Cross listed as PO 212.]
Every 2-3 years. 3 Credits

HI-213 Colonial Latin America
The People of Latin America from Pre-Columbian societies to the wars for independence, focusing on race, sex and power.
Every 2-3 years. 3 Credits

HI-214 Modern Latin America
LASC Categories: TLC, GP, DAC
The people of Latin America from independence to the present, focusing on race, sex and power.
Every 2-3 years. 3 Credits

HI-215 History of American Thought
LASC Categories: TLC, USW, DAC, WAC
Prerequisites: HI-111 or HI-112 and EN-102, EN-202 or EN-250
Explores the history of ideas in the United States, including major intellectual movements, thinkers, and texts. Cross-listed with Women's Studies.
Every 2-3 years. 3 Credits

HI-216 Economic History of the US
An introduction to United States economic development; particular attention will be paid to industrialization and the labor force.
Every year. 3 Credits

HI-217 US Social History
LASC Categories: TLC, USW, DAC, WAC
Prerequisites: EN-102, EN-202 or EN-250
Survey of social and cultural history. Topics such as family, religion, education, popular literature, architecture, transportation, and reform.
Every 2-3 years. 3 Credits

HI-218 US Constitutional History I
LASC Categories: CON, HBS, USW
The development of constitutional history to 1865. [Cross listed as PO-218.]
Every 2-3 years. 3 Credits

HI-219 US Constitutional History II
LASC Categories: CON, USW, HBS
The development of the United States constitution since 1865.[Cross listed as PO-219.]
Every 2-3 years. 3 Credits

HI-221 African-American History I
The people of African descent from the emergence of the slave trade to the Civil War, focusing on race, gender, and power.
Every year. 3 Credits

HI-222 African-American History II
The people of African descent from the end of the Civil War through the twentieth century, focusing on race, class, gender, and power.
Every year. 3 Credits

HI-223 History of France I
Prerequisites: HI-103 and HI-104
Social, cultural and military developments of France during the Middle Ages and the Capetian, Valois and Bourbon periods to 1750.
Every 2-3 years. 3 Credits

HI-224 English History I
LASC Categories: TLC, WAC
Prerequisites: HI-103 or HI-104 and EN-102, EN-202 or EN-250
English history from earliest settlement to the reign of Elizabeth I. Origins of the Common Law, Parliament, and English liberty.
Every 2-3 years. 3 Credits

HI-225 English History II
LASC Categories: WAC, TLC
Prerequisites: EN-102 or EN-250 or EN-202 and any one of the following: HI 103, HI 104, HI 105, HI 111, HI 112, HI 203, HI 224, HI/PO 241.
English history through the English Revolution, the Industrial Revolution, the British Empire, the World Wars, and decline.
Every 2-3 years. 3 Credits

HI-226 Latin American History Through Film
This course will explore how filmmakers have portrayed Latin American History in their movies.
Every 2-3 years. 3 Credits

HI-230 Nicaragua, the US and the World
LASC Categories: USW, DAC, TLC
The course will examine the impact of globalization and imperialism on the lives of Nicaraguans at home and in their diasporic communities.
Spring only and every year. 3 Credits

HI-232 European Intellectual Hist II
Prerequisites: HI-103 or HI-104
The main theoretical works, philosophic, psychological and scientific, of the nineteenth and twentieth centuries.
Every 2-3 years. 3 Credits

HI-233 History of Latin America
The Spanish Conquest, colonial institutions, wars of independence, and development of Mexico, Brazil and Argentina.
Every 2-3 years. 3 Credits

HI-234 Russian History I
A study of major political, economic, social, intellectual and diplomatic currents in Russia, from the Kievan era to Stalin.
Every 2-3 years. 3 Credits

HI-235 Russian History II
A study of major political, economic, social, intellectual, and diplomatic currents in Russia, from the Kievan era to Stalin.
Every 2-3 years. 3 Credits

HI-236 Modern Far East History I
The cultural, political, and economic roots of modern East ASia, focusing on China, Japan, Korea and Vietnam.
Every year. 3 Credits

HI-237 Modern Far East History II
The transformation and re-invention of East Asian societies since World War II.
Every year. 3 Credits

HI-240 American Popular Culture
This course is an introduction and survey of the multi-disciplinary field of American Popular Culture, analyzing popular or non-elite culture in the United States from the colonial era to the present.
Every year. 3 Credits

HI-241 English Constitutional History
LASC Categories: GP, HBS
The development of English Constitution from the Magna Carta through revolution, supremacy of Parliament, reform acts, entry into European Union, and devolution.
Every 2-3 years. 3 Credits

HI-242 History of Early Modern Europe
Forces that shaped Europe since the Reformation: the political, economic, and intellectual context of the external expansion as well as the external turmoils, such as the Thirty Years War and the European economy to 1789.
Every 2-3 years. 3 Credits

HI-243 Introduction to Public History
Introduction to the field, theory, and practice of Public History and associated institutions such as museums, archives, and historical sites.
Every 2-3 years. 3 Credits

HI-244 American Urban History
The process of accelerating urbanization in America since the nineteenth century: cultural, social, economic, and political aspects of urban life.
Every 2-3 years. 3 Credits

HI-245 History of Modern Germany I
The origins and growth of Brandenburg-Prussia; their impact on the rest of Germany from the foundation of the Holy Roman Empire to the emergence of the Second Reich in 1871.
Every 2-3 years. 3 Credits

HI-246 History of Modern Germany II
German economic and political crises from 1870 to the present.
Every 2-3 years. 3 Credits

HI-247 Central America and the Caribbean
This survey examines the political, cultural and social history of Central America and the Caribbean from pre-Columbian times to the present with an emphasis on the 20th century.
Every 2-3 years. 3 Credits

HI-248 Seminar on Globalization & Human Rights
LASC Categories: USW, GP, DAC
A.I.D. program participants in their sophomore year will explore globalization and human rights and issues of personal growth and academic development.
Every 2-3 years. 3 Credits

HI-249 US Labor History I
The relationship between workers, their employers and the surrounding community between 1815 and World War II.
Every 2-3 years. 3 Credits

HI-250 Special Topics in History
Special topics at the introductory or intermediate level; especially appropriate for first and second-year students.
Every year. 3 Credits

HI-251 Roots of China's Rise: Reform, Revolution and Reinvention
LASC Categories: TLC, GP
Examines the modern historical roots of China's rise as an international power, from the decline of its last imperial dynasty through the tumults of 20th century social movements to its recent emergence as a global economic power.
Every 2-3 years. 3 Credits

HI-255 Faculty-Led Study Abroad: China Cultural Immersion
LASC Categories: TLC, GP
Experientially based immersion in the culture and society of China, consisting of language study, visits to historical and cultural sites, cultural immersion activities in local life, and the opportunity to engage with Chinese students.
Other or on demand. 3 Credits

HI-257 Political Terrorism in Historical Perspective
A comparative approach to the terrorist movements of the nineteenth and twentieth centuries, concentrating on the European groups.
Every 2-3 years. 3 Credits

HI-258 Russia Since the Stalin Era
An analysis of the major political, economic and diplomatic developments in the (former) Soviet Union since the death of Stalin; the formation of the Commonwealth of Independent States.
Every 2-3 years. 3 Credits

HI-260 Egypt Since 1798
A discussion of Napoleon's occupation of Egypt, the rise of Muhammad 'Ali, Suez Canal, British Occupation, Egyptian Nationalism, Nasser's Revolution.
Every 2-3 years. 3 Credits

HI-261 Middle East History I
LASC Categories: TLC, GP
The rise and expansion of Islam; the Caliphate; Muslim religion, civilization and its impact on the West, decline of medieval Islam.
Every 2-3 years. 3 Credits

HI-262 Middle East History II: The Ottoman Empire, 1289-1920
LASC Categories: TLC, WAC, GP
Prerequisites: EN-102, EN-202 or EN-250
The Ottoman Empire: expansion, institutions, impact on Europe, decline of the Empire.
Every 2-3 years. 3 Credits

HI-263 US-Middle East Relations
LASC Categories: USW, GP
Prerequisites: HI-103 or HI-104 or HI-111 or HI-112
Course will discuss the influence the Middle East has had on United States policy since United States independence to the present.
Every 2-3 years. 3 Credits

HI-267 US-Latin American Relations
LASC Categories: USW, WAC, DAC
Prerequisites: EN-102, EN-202 or EN-250
This course will analyze the political, economic, social, and cultural impact of the interactions between and among the governments and people of the US and Latin America.
Every year. 3 Credits

HI-270 History of Modern Italy
Study of modern Italy from 1789 to the present.
Every 2-3 years. 3 Credits

HI-274 Sex, Marriage and the Family
LASC Categories: TLC, DAC
This course will undertake a study of courtship, marriage, and family life-cycle patterns in comparative perspective.
Every 2-3 years. 3 Credits

HI-275 The History of Childhood
The central focus of this course is to determine how children were regarded and treated by adults during the sixteenth through nineteenth centuries.
Every 2-3 years. 3 Credits

HI-276 Jewish History I
This course constitutes a systematic introduction to the Biblical history of the Jewish people down to the 12th century.
Every 2-3 years. 3 Credits

HI-277 Jewish History II
History of the Jewish people from Medieval period to early Modernity.
Every 2-3 years. 3 Credits

HI-281 History of France II
Prerequisites: HI-103 and HI-104
Social, cultural, and diplomatic developments in France from 1750 to the present.
Every 2-3 years. 3 Credits

HI-285 History of Baseball
LASC Categories: DAC, USW, TLC
History of baseball from the first bat-and-ball games to the present.
Every 2-3 years. 3 Credits

HI-290 Health and Healing in America
LASC Categories: ICW, TLC, WAC
Prerequisites: EN-102, EN-202 or EN-250
Explores topics in the history of medicine, health, disease, and healing in US history.
Every 2-3 years. 3 Credits

HI-300 The Early National Period of the US: 1783-1829
LASC Categories: USW, TLC
Prerequisites: HI-111
The Confederation, Constitution, the emergence of political parties, and the rise of American nationality.
Every 2-3 years. 3 Credits

HI-302 Medieval History
Prerequisites: HI-103
Cultural, social and diplomatic European history of the Middle Ages from fall of the Roman Empire until the rise of the Renaissance.
Every 2-3 years. 3 Credits

HI-303 Colonial History I
Prerequisites: HI-111 and HI-112
European background and reasons for American colonization, intercolonial rivalries, formation of the 17th century English colonies. British colonial policy to 1689.
Every 2-3 years. 3 Credits

HI-304 Colonial History II
Establishment of Georgia, French and Indian Wars, 18th century colonial civilization, causes of the American Revolution, the Revolution to 1783.
Every 2-3 years. 3 Credits

HI-305 Ancient History
Prerequisites: HI-103
The history, culture and politics of ancient Greece and Rome.
Every 2-3 years. 3 Credits

HI-306 Renaissance and Reformation
Prerequisites: HI-103
Intellectual and cultural history of Europe from the middle of the thirteenth to the middle of the sixteenth century.
Every 2-3 years. 3 Credits

HI-308 Europe in the Age of Revolution and Nationalism: 1789-1870
Prerequisites: HI-103 or HI-104
The French Revolution, Napoleon, Congress of Vienna; nationalism, liberalism, socialism; Second French Empire; German and Italian unifications.
Every 2-3 years. 3 Credits

HI-309 Diplomatic History of Modern Europe
The foreign policies of the major European nations from 1870 to the present.
Every 2-3 years. 3 Credits

HI-310 Massachusetts History
Prerequisites: HI-111 or HI-112
A survey of Massachusetts history from its colonial origins to the present era, including the social, economic, political, constitutional development of state history and culture.
Every year. 3 Credits

HI-312 20th Century Europe I
Prerequisites: HI-103 or HI-104
The politics and economics of World War I; the pattern of restlessness between the wars in the rise of dictatorship in Germany, Italy, and Spain; the regimentation of economic control.
Every 2-3 years. 3 Credits

HI-313 20th Century Europe II
Prerequisites: HI-103 or HI-104
Politics and diplomacy of World War II; the dynamics of the rebirth of Europe since VE Day. The effects of total war upon Europe.
Every 2-3 years. 3 Credits

HI-314 20th Century Middle East History
LASC Categories: GP, TLC, DAC
Prerequisites: HI-103 or HI-104 or HI-105 or HI-111 or HI-112 or HI-261
The Young Turk Revolution, division of Ottoman Empire in World War I; rise of new states; the Arab-Israeli conflict.
Every 2-3 years. 3 Credits

HI-316 American-Russian Relations 1781- Present
Prerequisites: HI-104 or HI-105 or HI-111 or HI-112.
An analysis of American-Russian relations from their inception to the present, stressing the period since 1917.
Every 2-3 years. 3 Credits

HI-319 Material Culture
Focuses on the way scholars use and analyze objects in historical, social and cultural content.
Every 2-3 years. 3 Credits

HI-320 Citizen Nation
LASC Categories: CON, TLC, USW, DAC, WAC
Prerequisites: HI-111 or HI-112 and EN-102, EN-202 or EN-250
Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria.
Fall only and every 2-3 years. 3 Credits

HI-321 Museums and Society
Course on the history of museums and their development as a major space for public history and memory.
Every 2-3 years. 3 Credits

HI-322 Nationalism
LASC Categories: GP, HBS, DAC
Examines the theories of nationalism, the development of the modern nation-state, and its effect on global politics.
Every 2-3 years. 3 Credits

HI-323 Empire
Prerequisites: HI-103 and HI-104
Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's.
Every 2-3 years. 3 Credits

HI-330 Politics of the Middle East I
Prerequisites: one course from HI-104 HI-105 HI-111 HI-112 PO-101 HI-261 or HI-314
Discusses governments and politics of eastern Arab countries, Turkey, Iran, and Israel. International rivalries in the area are also discussed. [Cross listed as PO330.]
Every 2-3 years. 3 Credits

HI-333 Women in Latin America
Prerequisites: HI-213 HI-214 HI-226 or HI-247
Examines the roles of women in diverse societies including Mexico, Brazil and Caribbean nations. Emphasis on the modern period.
Every 2-3 years. 3 Credits

HI-335 Imperial Crossroads of Modern East Asia
LASC Categories: TLC, GP
Examines East Asian history at the crossroads of Chinese, Japanese, Russian and Korean colonial and nationalist movements in a region called Manchuria, presently China's northeast border with Russia, Korea, and Mongolia.
Every 2-3 years. 3 Credits

HI-337 Travels in Asia
LASC Categories: TLC, GP
Travels in Asia examines modern East Asian history through the lens of Chinese, Japanese, European, and American travel narratives from the seventeenththrough the twentieth centuries.
Every 2-3 years. 3 Credits

HI-338 History of Political Theory I
The development of political thought from the Greeks to the Enlightenment. [Cross listed as PO338.]
Every 2-3 years. 3 Credits

HI-339 History of Political Theory II
The development of political thought from the Enlightenment to the present. [Cross listed as PO339.]
Every 2-3 years. 3 Credits

HI-345 Religions in America
LASC Categories: TLC, USW, DAC, WAC
Prerequisites: HI-111 and HI-112 and EN-102 or EN-202 or EN-250
Considers topics in American religious history and explores religious diversity in the past and in contemporary United States.
Every 2-3 years. 3 Credits

HI-349 America on Film
Prerequisites: HI-111 or HI-112
This course examines the origins and nature of the US film industry and how it uses and abuses history from 1893 to the present.
Every 2-3 years. 3 Credits

HI-350 Native American Women
Prerequisites: HI-205 or equivalent.
Examines Indian women from the time of European contact to the modern era. Emphasizes culture, community and arenas of power.
Every 2-3 years. 3 Credits

HI-351 Age of Jackson
LASC Categories: USW, TLC
Prerequisites: HI-111 or HI-112
Political, social, economic, and intellectual developments in the second quarter of the nineteenth century.
Every 2-3 years. 3 Credits

HI-352 Civil War and Reconstruction
Prerequisites: HI-111
Sectionalism, slavery, and modern industrial warfare as well as their impact on the political and racial fabric of America.
Every 2-3 years. 3 Credits

HI-353 The Age of Reform: 1877-1920
Prerequisites: HI-111 and HI-112
An analysis of the transformation of America, including reform response to the Gilded Age's industrialization, urbanization and immigration patterns.
Every 2-3 years. 3 Credits

HI-356 The History of the Cold War
LASC Categories: USW
Prerequisites: HI-104 or HI-105 or HI-112
The origins of the Cold War, American, Soviet and Chinese foreign policies, arms control negotiations and future prospects.
Every 2-3 years. 3 Credits

HI-366 American Revolutionary Period
LASC Categories: TLC, USW
Basis problems between English colonies and mother country, military aspects of the American Revolution, Confederation Period, making of the Constitution. Consent of instructor.
Every 2-3 years. 3 Credits

HI-380 American Foreign Policy Since the Cold War
LASC Categories: HBS, USW, CON
Prerequisites: PO-101 or PO-110 or HI-112 or HI-212
Instruments of American foreign policy; major foreign policy developments since 1989.
Every 2-3 years. 3 Credits

HI-381 The First World War
The origins, course, and consequences of the First World War.
Every 2-3 years. 3 Credits

HI-400 Independent Study in History
Special topics for advanced research and study under the guidance of a faculty member. Consent of instructor.
Fall and Spring and every year. 1-6 Credits

HI-408 Directed Study: History
Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

HI-411 The Historian's Craft
Prerequisites: HI-111 HI-112 HI-103 HI-104
A methods course providing hands-on exploration of American history as both a professional field and a scholarly discipline.
Fall and Spring and every year. 3 Credits

HI-420 Seminar in American Constitutional History
Prerequisites: one of the following: HI-218, PO-218, HI-219, PO-219, HI-241, PO-241.
Reading, research and discussion on a specially selected phaseof American constitutional development; an original paper of significant scholarship is required. Consent of instructor.
Every 2-3 years. 3 Credits

HI-421 Seminar in English Constitutional History
Reading, research and discussion on a phase of English constitutional development; an original paper of significant scholarship is required. Consent of instructor.
Every 2-3 years. 3 Credits

HI-422 Seminar in Ancient Constitutional History
Reading, research and discussion of a selected phase of ancient constitutional development; an original paper is required. Permission of instructor. Consent of instructor.
Every 2-3 years. 3 Credits

HI-430 European History and Historians
The study of Europe's major schools of historical thought with emphasis on how Europe's history has been written. Consent of instructor.
Every 2-3 years. 3 Credits

HI-435 Issues in Modern Middle East
Prerequisites: HI-261 or HI-314 or PO-330
Emphasizes reading, research and writing. Students will choose issues, research them, make a class presentation, then develop the presentation into a paper.
Every 2-3 years. 3 Credits

HI-440 Internship in History
Internships in museums, archives, government agencies, etc. at beginning professional level in cooperating institutions, under joint supervision of agency and faculty.
Fall and Spring and every year. 6-12 Credits

HI-450 Special Topics in History
Advanced special topics in history; course may be taught as an upper level seminar.
Other or on demand. 3 Credits

HI-460 Senior Research Seminar in History
LASC Categories: WAC, CAP
Prerequisites: HI-411 and EN-102, EN-202 or EN-250
Capstone research, writing and portfolio seminar for seniors in the history major; students produce a substantive original research paper.
Fall and Spring and every year. 3 Credits

HI-465 American Antiquarian Society Seminar
LASC Categories: CAP
Prerequisites: HI-411 Permission of Instructor
The American Antiquarian Society sponsors a prestigious annual seminar each fall for a select group of undergraduates from Worcester colleges and universities; participants produce a substantial original research paper. The topic and theme varies year to year, guided by a visiting scholar at the AAS. Suitable for upper-level undergraduates who can work independently and have strong analytical and writing skills. Usually 2 slots are reserved for WSU students through a competitive application process. Fall only and every year. 3 Credits

HI-470 Senior Thesis in History
LASC Categories: CAP, WAC
Prerequisites: HI-411 and EN-102, EN-202 or EN-250
History major capstone option for students who intend to write a senior thesis in history.
Fall and Spring and every year. 3 Credits

History Major

Requirements for a Major in History

42 credits including:

Requirements for a Major in History		(15 credits)
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-111	US History I	3
HI-112	US History II	3
Electives [1]		(24 credits)
US History electives		6
European History electives		6
Area Studies electives		6
Select one other elective in history, which can be from the "General" category [2]		3
Two electives must be at the 300 or 400 level [3]		3
Historical Methods [4]		(3 credits)
HI-411	The Historian's Craft	3
or HI-440	Internship in History	
Capstone Experience [5]		(3 credits)
HI-460	Senior Research Seminar in History	3
or HI-470	Senior Thesis in History	
Total Credits		45

1. All electives must be at the 200 level or higher.
2. Any history offerings excluding required survey courses HI-103, HI-104, HI-105, HI-111 and HI-112)
3. Two electives must be at the 300 or 400 level excluding required HI-411
4. To be taken during sophomore or junior year.
5. For majors entering in curriculum year 2010 and later. Senior capstone experience, usually taken during Fall of senior year.

Exception for Double Majors in Early Childhood or Elementary Education

Only 36 History credits are required; a student may opt to omit the "One Other" elective and the capstone course. If not taking the capstone course, the senior capstone requirement must be fulfilled by submission of a non-credit History Learning Portfolio before or during the student-teaching semester. See department for Portfolio forms and submission guidelines.

Sample Timetable for Completion of Degree: History

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
HI-111	US History I	3
HI-103	World Civilization I	3
MA	Math Foundation Course or (QR)	3
	Credits	15
Semester Two		
LASC	LASC Elective (QR) (p. 61)	3
EN-102	English Composition II	3
HI-112	US History II	3
HI-104	World Civilization II	3
SELECT	Elective or Minor Course	3
	Credits	15

Year Two		
Semester Three		
HI-105	World Civilization III	3
HI-1XX+	1 of 2 U.S. History Electives	3
HI-1XX+	1 of 2 European History Electives	3
LASC	LASC Elective (USW) (p. 61)	4
SELECT	Elective or Minor Course	3
	Credits	16
Semester Four		
HI-1XX+	1 of 2 Area Studies History Electives	3
HI-3XX+	2 of 2 U.S. History Electives (300/400 level)	3
HI-411	The Historian's Craft	3
LASC	LASC Elective (NS)	3
LASC	General Elective or Minor course	3
	Credits	15
Year Three		
Semester Five		
HI-1XX+	2 of 2 European History Electives	3
HI-1XX+	2 of 2 Area Studies History Electives	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Six		
LASC	LASC Elective (NSP) (p. 59)	4
HI-1XX+	Elective in Major	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (GP) (p. 54)	3
SELECT	General Elective or Minor course	3
	Credits	16
Year Four		
Semester Seven		
HI-460 or HI-470	Senior Research Seminar in History (If minoring in Middle or Secondary Education complete Capstone in Semester 7) or Senior Thesis in History	3
SELECT	General Elective or Minor course	3
LASC	LASC Elective (CA) (p. 50)	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
	Credits	15
Semester Eight		
HI-460 or HI-470	Senior Research Seminar in History or Senior Thesis in History	3
SELECT	General Elective or Minor course	3
LASC	LASC Elective (TLC) (p. 63)	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
	Credits	15
	Total Credits	122

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

History Major, Concentration in Foreign Service

Requirements for a Major in History, Concentration in Foreign Service

Programs are individually planned with the student's advisor and prepare individuals for careers in the State Department and the intelligence community. In addition to required courses, students will

be encouraged to elect courses in the areas of economics, languages, management, geography, and related fields.

Requirements for a Major in History		(15 credits)
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-111	US History I	3
HI-112	US History II	3
Electives [1]		(24 credits)
US History electives		6
European History electives		6
Area Studies electives		6
Select one other elective in history, which can be from the "General" category [2]		3
Two electives must be at the 300 or 400 level [3]		3
Historical Methods [4]		(3 credits)
HI-411	The Historian's Craft	3
or HI-440	Internship in History	
Capstone Experience [5]		(3 credits)
HI-460	Senior Research Seminar in History	3
or HI-470	Senior Thesis in History	
Total Credits		45

1. All electives must be at the 200 level or higher.
2. Any history offerings excluding required survey courses HI-103, HI-104, HI-105, HI-111 and HI-112)
3. Two electives must be at the 300 or 400 level excluding required HI-411
4. To be taken during sophomore or junior year.
5. For majors entering in curriculum year 2010 and later: Senior capstone experience, usually taken during Fall of senior year.

Exception for Double Majors in Early Childhood or Elementary Education

Only 36 History credits are required; a student may opt to omit the "One Other" elective and the capstone course. If not taking the capstone course, the senior capstone requirement must be fulfilled by submission of a non-credit History Learning Portfolio before or during the student-teaching semester. See department for Portfolio forms and submission guidelines.

History Major, Concentration in Public History

Requirements for a Major in History, Concentration in Public History

Juniors and seniors have the opportunity for independent study and off-campus internships. Students may receive academic credit for internships in history museums, historic restorations, historic libraries, archives, or in any one of a great variety of agencies in state, county, and local government. Internship/ independent study credit may be given for internships in private sector agencies which have a public interest. Public history concentrators will be able to complete the requirements for the history major and the political science minor.

Requirements for a Major in History

42 credits including:

Requirements for a Major in History		(15 credits)
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-111	US History I	3
HI-112	US History II	3
Electives [1]		(24 credits)
US History electives		6
European History electives		6
Area Studies electives		6
Select one other elective in history, which can be from the "General" category [2]		3
Two electives must be at the 300 or 400 level [3]		3
Historical Methods [4]		(3 credits)
HI-411	The Historian's Craft	3
or HI-440	Internship in History	
Capstone Experience [5]		(3 credits)
HI-460	Senior Research Seminar in History	3
or HI-470	Senior Thesis in History	

Political Science Minor	(18 credits)
Political Science electives	18
Total Credits	63

1 All electives must be at the 200 level or higher.

2 Any history offerings excluding required survey courses HI-103, HI-104, HI-105, HI-111 and HI-112)

3 Two electives must be at the 300 or 400 level excluding required HI-411

4 To be taken during sophomore or junior year.

5 For majors entering in curriculum year 2010 and later: Senior capstone experience, usually taken during Fall of senior year.

Exception for Double Majors in Early Childhood or Elementary Education

Only 36 History credits are required; a student may opt to omit the "One Other" elective and the capstone course. If not taking the capstone course, the senior capstone requirement must be fulfilled by submission of a non-credit History Learning Portfolio before or during the student-teaching semester. See department for Portfolio forms and submission guidelines.

History Minor

Requirements for a Minor in History

Requirements		(18 credits)
HI-103	World Civilization I	3
HI-104	World Civilization II	3
HI-105	World Civilization III	3
HI-111	US History I	3
HI-112	US History II	3
HI-411	The Historian's Craft	3
History electives		(6 credits)
6 credits taken at 200 level or higher		6
Total Credits		24

Middle East Studies Minor

Requirements for a Minor in Middle East Studies

HI-261	Middle East History I	3
HI-314	20th Century Middle East History	3
AB-101	Beginning Arabic I	3
AB-102	Beginning Arabic II	3
6 credits recommended by advisor		6
Total Credits		18

Music

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts (p. 253), one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts.

Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Minor in Music and Minor in Composition and Music Technology

(See Visual and Performing Arts Department (p. 253) for a complete listing of requirements and courses.)

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music minor, students complete courses in the performance, history, composition, and theory of music, and also in applied music. Students must audition for applied music spots. Students are provided with opportunities to perform in ensembles as well as take a wide variety of classroom courses to enhance musical understanding and literacy.

Requirements for a Minor in Music

18 credits in music with 3 credits are required in each of the following:

Music Theory		(3 credits)
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-205	Music Theory I	
Music History		(0 credits)
SELECT	Music History (MU 115 Music Appreciation or historical period courses)	
Applied Studies		(3 credits)
private lessons or ensembles		3
Electives		(9 credits)
9 credits in music electives		9
Total Credits		15

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Students choose courses based on personal interest from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Visual and Performing Arts

Department of Visual and Performing Arts

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment.

Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

- Art Minor (p. 253)
- Composition and Music Technology Minor (p. 267)
- Music Minor (p. 266)
- Theatre Minor (p. 267)
- Visual and Performing Arts and Education, Double Major (p. 264)
- Visual and Performing Arts Major (p. 263)

Michael C. Hachey, Professor (1993), B.F.A., M.F.A. Massachusetts College of Art

Stacey Parker, Associate Professor (2007), B.F.A. Alfred University; M.F.A. Rochester Institute of Technology

Amaryllis Siniossoglou, Professor (2005), PEP Royal College of Art, London; M.F. A. University of Massachusetts, Amherst; Ecole Nationale Superieure Des Beaux-Arts, Paris; Diplome Superieur d' Art Plastique; School of Art, Athens; Certificate, Drawing and Painting School

Catherine Wilcox-Titus, Professor (2004), B.A. University of Toronto; M.S. Simmons College; M.A., Ph.D. Boston University

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A. Eastman School of Music

Christie B. Nigro, Professor (1989), B.M. Syracuse University; M.M Yale University; Ph.D. University of Massachusetts

Robert Sahagian, Professor (1968), B.M. New England Conservatory of Music; M.M., Ph.D. Michigan State University

John H. Hood, Professor (2004), B.F.A. Arizona State University; M.F.A. University of Minnesota

Sam O'Connell, Associate Professor (2010), B.A., M.A. Washington University; Ph.D. Northwestern University

Adam Zahler, Department Chair, Professor (2007), B.A. University of Vermont; M.F. A. University of Virginia

Art Courses

AR-100 Cross Media Studio
LASC Categories: CA, TLC
An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.
Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation
This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.
Fall and Spring and every year. 3 Credits

AR-112 World Art Survey I
LASC Categories: CA, TLC, DAC
Surveys the world's major cultural achievements in the visual arts from the prehistoric period to ca. 1400.
Every year. 3 Credits

AR-113 World Art Survey II
LASC Categories: CA, TLC, DAC
Major cultural achievements in the visual arts from ca 1400 to the early twentieth century.
Every year. 3 Credits

AR-117 Visual Design: 2 Dimensions
LASC Categories: CA
A foundation for visual literacy through studio work utilizing such art elements as line, form, color, and texture.
Fall and Spring and every year. 3 Credits

AR-118 Global Art History
LASC Categories: GP, WAC, DAC
Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.
Every year. 3 Credits

AR-122 Visual Design: 3-DIMENSIONS
LASC Categories: CA
A foundation for visual literacy through studio work utilizing spatial elements such as plane, mass, volume, and structure.
Fall only and every year. 3 Credits

AR-123 Design Fundamentals
LASC Categories: CA, QAC
Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibbonaci series, fractals, regular solids.
Fall and Spring and every year. 3 Credits

AR-130 Painting I
LASC Categories: CA
An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression
Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals
LASC Categories: CA, GP, DAC
The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.
Fall and Spring and every year. 3 Credits

AR-150 Life Studio I
LASC Categories: CA
Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.
Fall and Spring and every year. 3 Credits

AR-160 Sculpture I
LASC Categories: CA, GP, WAC
Prerequisites: EN-102
Three-dimensional studio creations through a variety of traditional and contemporary materials. Both realistic and abstract concepts are explored.
Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms
LASC Categories: CA, GP, WAC, DAC
Prerequisites: EN-102
A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.
Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art
3 Credits

AR-193 First Year Seminar in Art
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

AR-200 History of American Art
LASC Categories: CA, TLC
A survey of the visual arts in the United States, from the Colonial Period to the present.
Spring only and other or on demand. 3 Credits

AR-210 Drawing and Painting Studio
LASC Categories: CA
This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.
Fall and Spring and every year. 3 Credits

AR-220 Foundations of Modern Art
LASC Categories: TLC, CA
Influential 19th Century developments, such as Romanticism, Realism, and Impressionism, are discussed in relationship with early 20th Century art.
Fall and Spring and every 2-3 years. 3 Credits

AR-225 Art Since Mid-20th Century
LASC Categories: CA, GP, WAC, DAC
Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.
Fall only and every year. 3 Credits

AR-230 Printmaking
LASC Categories: CA
Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.
Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio
LASC Categories: CA, GP
This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage and use historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.
Fall and Spring and every year. 3 Credits

AR-240 Watercolor
LASC Categories: CA, TLC
A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.
Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools
LASC Categories: CA
An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.
3 Credits

AR-270 Driftwood to Dumpsters
LASC Categories: CA, TLC, WAC
Prerequisites: EN-102
Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.
Every 2-3 years. 3 Credits

AR-275 Gallery and Museum Studies
LASC Categories: CA, TLC
All aspects of installation and exhibition of art work in WSU gallery, including solicitation of art, publicity, display, and management.
Every 2-3 years. 3 Credits

AR-285 History of Photography
LASC Categories: CA, TLC
The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]
Every 2-3 years. 3 Credits

AR-300 Painting II
Prerequisites: AR-130 or consent of instructor.
Continuation of painting with emphasis on individual development through interpretive projects.
Spring only and every 2-3 years. 3 Credits

AR-302 Drawing II
Prerequisites: AR-140 or consent of instructor
Advanced projects in drawing with increasing emphasis on individual direction.
Fall and Spring and every 2-3 years. 3 Credits

AR-306 Sculpture II
Prerequisites: AR-160 or consent of instructor.
Further exploration of sculptural form with a diversity of materials, techniques, and expressive meaning.
Spring only and every 2-3 years. 3 Credits

AR-330 Intermediate Printmaking
Prerequisites: AR-230
Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.
Every year. 3 Credits

AR-350 Special Topics in Art
Prerequisites: one studio course or consent of instructor.
A course covering topics which vary in response to specific student and faculty interest.
Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art
An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.
Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone
LASC Categories: CAP
Students research, design, and create their work for public presentation and evaluation by a faculty board of review. This is the final course in the Art Major and is a requirement for all the majors.
Spring only and every year. 3 Credits

Music Courses

MU-100 Music Fundamentals
LASC Categories: CA
An introduction to the rudiments of music theory, including pitch and rhythmic organization. Emphasis is placed on intervals, major and minor scales, reading and writing rhythm, and chord structures.
Fall and Spring and every 2-3 years. 3 Credits

MU-101 Fundamentals of Music and Aural Skills
LASC Categories: CA
An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.
Every year. 3 Credits

MU-102 Applied Music
Prerequisites: Audition required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and every year. 1 Credit

MU-104 Class Piano
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano technique and pedagogy in a group setting of 12 or fewer
Fall and Spring and every year. 1 Credit

MU-106 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation
LASC Categories: CA
General survey of masterpieces of major composers of various periods in history of music.
Fall and Spring and every year. 3 Credits

MU-120 Ear Training
Prerequisites: MU-100 or MU-101
An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfege.
Every year. 3 Credits

MU-125 Jazz Appreciation
LASC Categories: CA, TLC
Surveys the history of jazz beginning with the earliest roots in the American South to today.
Every year. 3 Credits

MU-140 World Music
LASC Categories: CA
An introducation to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.
Spring only and every 2-3 years. 3 Credits

MU-150 Opera
Analysis of the masterworks of the standard operatic repertoire.
Spring only and every year. 3 Credits

MU-175 Music in America
Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.
Other or on demand. 3 Credits

MU-185 Composition I
LASC Categories: CA
Prerequisites: MU-100 or MU-101
An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.
Spring only and every year. 3 Credits

MU-190 Piano Class
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano proficiency. Class topics will include an introduction to the keyboard, hand position, and music theory. Solo literature appropriate to the level will be studied.
1 Credit

MU-193 Special Topics in Music:First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

MU-195 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Every year. 1 Credit

MU-200 Issues in Music
This course deals with topics of special interest, in both seminars and studio environments at an introductory level.
3 Credits

MU-202 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I
LASC Categories: CA
Prerequisites: MU-100 or 101.
Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.
Spring only and other or on demand. 3 Credits

MU-208 Music Software
Prerequisites: MU-100 or MU-101
A survey of music software including Finale, Sibelius, Logic, GarageBand and other current applications. Students will explore the features of each program relative to notation, composition, arranging, and recording.
Every year. 3 Credits

MU-210 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Analysis and application of harmonization techniques using diatonic and chromatic chords. Emphasis is placed on voice-leading, non-chord tones, secondary chords, and modulation.
Other or on demand. 3 Credits

MU-213 Music Technology of MIDI Systems and Digital Audio
Prerequisites: MU-100 or knowledge of notation and department consent.
Offers study in MIDI/Digital Audio Systems and electronic music synthesis in a Macintosh environment. Prepares student interested in audio engineering.
Fall only and every year. 3 Credits

MU-215 Chorus and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.
Fall and Spring and every year. 3 Credits

MU-220 Chorus
LASC Categories: CA
Prerequisites: MU-215
Mixed Chorus repertoire. May be repeated.
Fall and Spring and every year. 1 Credit

MU-222 African Drumming
LASC Categories: GP, CA, DAC
An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.
Every year. 3 Credits

MU-225 Band
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in repertoire and performance. May be repeated.
Fall and Spring and every year. 0.5-1 Credits

MU-226 Band and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in music notation and style of instrumental music. Participation in college band required.
Fall and Spring and other or on demand. 3 Credits

MU-228 Piano Ensemble
LASC Categories: CA
Prerequisites: MU-102 or MU-190
A small ensemble for keyboard players who will learn, explore, and perform four- hand piano repertoire.
Every year. 1 Credit

MU-231 Women in Music
LASC Categories: CA, TLC
A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.
3 Credits

MU-234 Music of the Baroque Period
The period of 1600-1750 with emphasis on Bach and Handel.
Fall and Spring and other or on demand. 3 Credits

MU-235 Music of the Classical Period
The period 1750-1827; Haydn, Mozart and Beethoven.
Fall and Spring and every year. 3 Credits

MU-237 Music in the Elementary School
LASC Categories: CA
Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.
Other or on demand. 3 Credits

MU-240 Music of the Romantic Period
An examination of Nineteenth Century music, beginning with Beethoven. [MU 140]
Fall and Spring and every 2-3 years. 3 Credits

MU-245 20th Century Music
A comprehensive study and general listener's approach to contemporary music beginning with Impressionism.
Spring only and every 2-3 years. 3 Credits

MU-250 Music of the Cinema:Spectacle, Splendor, And Spielberg
LASC Categories: CA, TLC
An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.
Spring only. 3 Credits

MU-255 The Golden Era of Piano Music
LASC Categories: CA
A survey of piano music beginning with Beethoven and continuing through the Romantic tradition to the early twentieth century.
Every 2-3 years. 3 Credits

MU-260 Symphonic Music
LASC Categories: CA
A survey of symphonic music beginning with the Classical Period.
Spring only and every 2-3 years. 3 Credits

MU-265 The Concerto
LASC Categories: CA
The concerto from the eighteenth to the twentieth century with emphasis on the development of the piano concerto.
Spring only and every 2-3 years. 3 Credits

MU-270 Music in Horror Films
A survey of scores composed for horror films. Emphasis is placed on the role of music in the genre and the composer's interpretation of various components of screenplays, including narrative, characters, and emotional content.
Every 2-3 years. 3 Credits

MU-275 Computers and Music
Prerequisites: MU-205
An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance, Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.
Other or on demand and other or on demand. 3 Credits

MU-280 History of Music
A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.
Fall and Spring and every year. 3 Credits

MU-281 Music History I
LASC Categories: CA
A general historical survey of Western art music from the Medieval, Renaissance, and Baroque Periods.
Every year. 3 Credits

MU-282 Music History II
LASC Categories: CA
A general survey of Western art music from the Classical and Romantic Periods, and the Twentieth Century.
Every year. 3 Credits

MU-285 Composition II
Prerequisites: MU-185 or MU-204, and MU-205.
A continuation of Composition I. Students will explore methods of tonal composition Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.
Fall and Spring and every year. 1 Credit

MU-300 Chorale
LASC Categories: CA
Prerequisites: Audition Required
Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated.
Every year. 1 Credit

MU-302 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall only and every year. 1 Credit

MU-305 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.
Fall only and every year. 3 Credits

MU-310 The American Musical in Performance
Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.
Every 2-3 years. 3 Credits

MU-321 Small Ensemble
LASC Categories: CA
The performance of musical works by a small ensemble. By permission of instructor or audition.
Fall and Spring and every year. 0.5-1 Credits

MU-375 Sound Synthesis
Prerequisites: MU-275
A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-380 Form and Analysis
Prerequisites: MU-210
An introduction to and analysis of the formal structures of music.
Fall and Spring and every year. 3 Credits

MU-385 Composition III
Prerequisites: MU-285 and MU-305.
An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter, This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.
Fall and Spring and every year. 1 Credit

MU-400 Independent Study in Music
Prerequisites: Consent of Instructor
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring. 1 Credit

MU-408 Directed Study: Music
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

MU-410 Special Topics in Music
This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio enviorments.
3 Credits

MU-485 Composition IV
Prerequisites: MU-385
Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.
Other or on demand. 1 Credit

Theatre Courses

TH-145 Acting I
LASC Categories: CA
Introductory acting theory and practice. Students present brief monologues and scenes in class.
Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre
LASC Categories: CA
An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.
Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

TH-226 Script Analysis
LASC Categories: CA, TLC, DAC
Script analysis for theatre artists. How to take a script from initial reading to production.
Every 2-3 years. 3 Credits

TH-236 History of Theatre I
LASC Categories: CA, TLC
Survey of world theatre from Golden Age of Athens to Restoration England including brief overview of Asian theatre.
Fall and Spring and every 2-3 years. 3 Credits

TH-237 History of Theatre II
LASC Categories: TLC, GP, DAC
Survey of western theatre from Eighteenth to Twentieth Century, with reference to roots and development in other world cultures.
Fall and Spring and every 2-3 years. 3 Credits

TH-246 Voice and Movement
Prerequisites: TH-191 and TH-245
Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.
Every year. 3 Credits

TH-270 History of American Entertainment I
LASC Categories: CA, USW
An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.
Every year. 3 Credits

TH-271 History of American Entertainment II
LASC Categories: CA, USW
An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.
Every year. 3 Credits

TH-272 History of Costume
LASC Categories: CA
The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.
Every 2-3 years. 3 Credits

TH-275 Introduction to Stagecraft and Design
LASC Categories: CA
Basic theories of scenic, costume, and design with practicum.
Other or on demand. 3 Credits

TH-290 Theatre for Young Audiences
LASC Categories: ICW, CA, DAC
Organization of children's theatre, script selesction, visual design, rehearsal and performance.
Investigation of creative drama as a teaching tool in elementary education.
Spring only and other or on demand. 3 Credits

TH-292 Creative Dramatics
LASC Categories: CA, ICW
Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.
Every year. 3 Credits

TH-321 Rehearsal and Performance
LASC Categories: CA
Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.
Spring only and every year. 3 Credits

TH-345 Acting II
Prerequisites: TH-191 TH-245
Further development of acting skills with emphasis on stage-acting technique.
Every year. 3 Credits

TH-348 Stage Combat
LASC Categories: CA, ICW
Prerequisites: TH-191
Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.
Every year. 3 Credits

TH-355 Theatre Practicum
Practical work on Theatre production in various areas including acting, design, stage management, construction, etc.
Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre
LASC Categories: CA
Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.
Every year. 3 Credits

TH-370 Costume Design for Theatre
LASC Categories: CA
Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.
Every year. 3 Credits

TH-380 Directing
Prerequisites: TH-245 and TH-191
Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.
Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre
LASC Categories: CA
Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.
Every year. 3 Credits

TH-399 Special Topics in Theatre
Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).
Other or on demand and other or on demand. 3 Credits

TH-408 Directed Study: Theatre
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Visual and Performing Arts Courses

VP-155 First Year Practicum
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.
Spring only and every year. 1 Credit

VP-191 Special Topics
Introductory course to cover various topics
3 Credits

VP-193 Special Topics in Visual and Performing Arts: First-Year Students
LASC Categories: FYS
Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.
Every year. 3 Credits

VP-200 Critical Thinking in the Arts
LASC Categories: CA, TLC, DAC, QAC
The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.
Every year. 3 Credits

VP-210 Contemporary Dance Styles I
LASC Categories: CA
The study and movement of dance vocabularies in one or more contemporary and modern styles.
Every year. 3 Credits

VP-255 Second Year Practicum
Prerequisites: VP-155
Students will put into practice interdisciplinary concepts, ideas, and techniques at a exploratory level.
Spring only and every year. 1 Credit

VP-300 Interdisciplinary Arts Seminar
Prerequisites: VP-200
Examines examples of contemporary modes of collaborative, interdisciplinary, and cross-disciplinary works of music, theatre, and visual art.
Fall only and every year. 3 Credits

VP-310 Contemporary Dance Styles II
LASC Categories: CA
Prerequisites: VP-210
The study and movement of contemporary dance vocabularies at the intermediate to advanced level.
Every year. 3 Credits

VP-355 Third Year Practicum
Prerequisites: VP-155 and VP-255
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.
Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory
Prerequisites: VP-200
An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.
Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice
Prerequisites: VP-364
Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.
Spring only and every year. 3 Credits

VP-375 Special Topics
A course that varies according to specific student and faculty interest.
Other or on demand. 3 Credits

VP-400 Arts Capstone/Senior Thesis
LASC Categories: CAP, WAC
Prerequisites: VP-200 VP-300 EN-102
Students research, design, and create works of art, music, and theatre for public presentation and evaluation by a faculty board of review.
Every year. 3 Credits

VP-405 Independent Study in the Arts
Prerequisites: Permission of Instructor
An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.
Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

VP-410 Special Topics in the Arts
Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]
Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts
Advanced students gain practical experience in a working arts environment.
Fall and Spring and every year. 3-12 Credits

Visual and Performing Arts Major

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

Students who select a VPA Major also select a concentration in Art, Music or Theatre. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students must complete the foundation courses plus the course required for a concentration in Art, Music or Theatre.

Requirements for a VPA Major – Foundation Courses

Minimum requirement for the major is completion of a three course (9 credit) Foundation curriculum, a three course (9 credit) Interdisciplinary Core, and 27 credits in one of three concentrations. Students will declare a concentration in Art, Music, or Theatre.

Interdisciplinary Foundation Courses		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	

MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Total Credits		18

Visual and Performing Arts and Education, Double Major

Students who double major in Early Childhood or Elementary Education may concentrate in Art, Music, Theatre, or Visual and Performing Arts. They will fulfill the Interdisciplinary Foundation and Core requirements plus requirements in their concentration for a total of 36 credits.

Requirements for an Emphasis in Art for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Art for Students who double major in Early Childhood or Elementary Education		(18 credits)
Art History		
Select one of the following:		3
AR-112	World Art Survey I	
AR-113	World Art Survey II	
AR-225	Art Since Mid-20th Century	
Studio Art		
AR-117	Visual Design: 2 Dimensions	3
AR-122	Visual Design: 3-DIMENSIONS	3
AR-140	Drawing Fundamentals	3
Art Pedagogy		
AR-260	Visual Arts in the Schools	3
Electives		
Art electives		3
Total Credits		36

Requirements for an Emphasis in Music for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Music for Students who double major in Early Childhood or Elementary Education		(18 credits)
Music Theory		
MU-101	Fundamentals of Music and Aural Skills (Unless taken as foundation)	3
or MU-205	Music Theory I	
Music Literature		
Select one of the following:		3

MU-115	Music Appreciation (Unless taken as foundation)	
MU-281	Music History I	
MU-282	Music History II	
Applied Music (Lessons and Ensembles)		
Select one of the following:		2
MU-102	Applied Music (1 credit each)	
MU-104	Class Piano	
Participation in two Ensembles at .5 credits each		1
Music Pedagogy		
MU-237	Music in the Elementary School	3
Electives in Music		
Electives		6
Total Credits		36

Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
Theatre Pedagogy		
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Performance and Production		
TH-145	Acting I	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Electives in Theatre		
Electives		3
Total Credits		36

Requirements for an Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
AR-260	Visual Arts in the Schools	3
MU-237	Music in the Elementary School	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Electives in Art, Music, Theatre, and Visual and Performing Arts		
Electives		6
Total Credits		36

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art related courses, including a minimum of three credits in art history and at least one art course at the 300-level.

SELECT	AR Electives	12
SELECT	Art History Elective	3
SELECT	AR Elective 300+	3
Total Credits		18

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music minor, students complete courses in the performance, history, composition, and theory of music, and also in applied music. Students must audition for applied music spots. Students are provided with opportunities to perform in ensembles as well as take a wide variety of classroom courses to enhance musical understanding and literacy.

Requirements for a Minor in Music

18 credits in music with 3 credits are required in each of the following:

Music Theory		(3 credits)
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-205	Music Theory I	
Music History		(0 credits)
SELECT	Music History (MU 115 Music Appreciation or historical period courses)	
Applied Studies		(3 credits)
private lessons or ensembles		3
Electives		(9 credits)
9 credits in music electives		9
Total Credits		15

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Students choose courses based on personal interest from a variety of fields to complete the elective component of this minor. These include creative writing, film and

video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least ones stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

Philosophy

Department of Philosophy

The study of philosophy helps students to develop insights into the nature of individuals, societies, and values, and it helps them to think critically about themselves and the world around them. By studying philosophical works from the past and present, East, West, North, and South, students engage theories about such central concepts as personhood, justice, gender, knowledge, language, and science.

- Philosophy and Law Minor (p. 349)
- Philosophy Minor (p. 349)

Faculty

Frank Boardman, Assistant Professor (2017), B.A., Hunter College; Ph.D., The City University of New York Graduate Center

Elena C. Cuffari, Assistant Professor (2014), B.A. Swarthmore College; Ph.D. University of Oregon

Daniel C. Shartin, Professor (1993), B.A., M.A., Ph.D. University of California, Los Angeles

Henry C. Theriault, Associate Vice President for Academic Affairs, Professor (1998), B.A. Princeton University; Ph.D. University of Massachusetts

Kristin B. Waters, Professor (1999), A.B. Bard College; M.A., Ph.D. University of Connecticut

PH-100 Introduction to Philosophy
LASC Categories: HBS, TLC
The fundamentals of philosophy: its vocabulary, problems, and methods.
Every year. 3 Credits

PH-101 Ancient Western Philosophy
Introduction to fundamantal topics in Western philosophy through works by philosophers including Plato and Aristotle.
Every 2-3 years. 3 Credits

PH-102 History of Modern Western Philosophy 1600-1800
LASC Categories: HBS, TLC
Engages central topics of Western philosophy through study of important modern philosophers, typically from Descartes through Kant.
Every 2-3 years. 3 Credits

PH-110 Critical Thinking
LASC Categories: TLC
Critical thinking through informal logical analysis of argument styles, including identification of fallacious arguments.
Every year. 3 Credits

PH-115 Logic I
LASC Categories: QR
A study of introductory symbolic (formal) logic course, covering sentential logic and the foundations of predicate logic.
Every year. 3 Credits

PH-130 Ethics: Human Conduct & Values
LASC Categories: HBS, TLC
The nature of morality and value and their place in the world of human action.
Every year. 3 Credits

PH-131 Medical Ethics
LASC Categories: HBS, TLC
An introductory-level examination of various ethical issues such as abortion, euthanasia, cloning and other genetics issues, access to health care, race and health care, and women's health.
Every 2-3 years. 3 Credits

PH-132 Business Ethics
LASC Categories: HBS, TLC
An introduction to ethical theory and issues such as truth in advertising, product liability, affirmative action, employer and employee rights and duties, whistle blowing, and corporate responsibility.
Every 2-3 years. 3 Credits

PH-133 Social and Political Ethics
LASC Categories: HBS, TLC, DAC
Investigates major social and politicl theories and their applications to selected problems of justice.
Every 2-3 years. 3 Credits

PH-150 Women in Western Ideas
LASC Categories: HBS, TLC, DAC
Investigates the concept of "woman" from ancient Greece to the present.
Every 2-3 years. 3 Credits

PH-151 Race, Gender, and the Law
LASC Categories: TLC, USW, CON
This course provides a philosophical approach to issues of race and gender as expressed in legislation, judicial interpretation, enforcement, and public policy.
Every 2-3 years. 3 Credits

PH-152 Philosophy of Love and Sex
LASC Categories: HBS, ICW, DAC
Investigates the concepts of love and sex and structural and discursive factors contributing to our daily experiences of these phenomena.
Every year. 3 Credits

PH-163 Philosophy on Television
LASC Categories: USW, TLC
An introduction to philosophy through philosophical writings on popular television shows.
Every 2-3 years. 3 Credits

PH-170 Ancient Chinese Philosophies in a Cultural Perspective
LASC Categories: GP, TLC
Ancient Chinese philosophies of Taoism, Confucianism, Buddhism, and neo-Confucianism in the context of contemporary developments in China; Communism, Capitalism, and Western influences considered.
Every 2-3 years. 3 Credits

PH-171 Buddhism:Theory and Meditative Practice
LASC Categories: TLC, GP
Examines the origins, texts, principles, and practices of Buddhist philosophy including the Four Noble Truths and Eightfold Path for individual practice.
Every 2-3 years. 3 Credits

PH-172 Asian Philosophies and Contemporary Perspectives
LASC Categories: GP
Studies the philosophies of India, China, Japan, and the vitality of ancient traditions in a time of cultural change: Buddhism, Taoism, Confucianism, Jainism, Hinduism and Islam.
Every 2-3 years. 3 Credits

PH-177 Introduction to Latin American Philosophy
LASC Categories: GP, TLC, DAC
An introduction to many of the principal texts, thinkers, and debates within Latin American philosophy.
Every 2-3 years. 3 Credits

PH-178 Africana Philosophy
LASC Categories: TLC, USW, DAC
Explores the philosophy of the African diaspora in African, African American and Caribbean writings. The course addresses both historical and contemporary material across intersections of race, gender, and class using philosophy, history, and literature.
Every 2-3 years. 3 Credits

PH-180 Sports and Philosophy
LASC Categories: ICW
Examines key ethical and other issues in sports, including competition, fair play, sportspersonship, drug use, race and gender, and violence.
Every 2-3 years. 3 Credits

PH-190 Special Topics in Philosophy
An introductory philosophy course on current or specialized topics. LASC Categories: Varies by topic. See current course listing for specific LASC area approved.
Every 2-3 years. 3 Credits

PH-193 First Year Seminar Philosophy
LASC Categories: FYS
An introductory course covering a topic of special interest to first-year students. Offered only as a First-Year Seminar.
Every 2-3 years. 3 Credits

PH-201 19th Century European Philosophy
LASC Categories: HBS, TLC
Engages the radical new philosophical ideas developed on the European Continent in the 19th Century, beginning with Hegel.
Every 2-3 years. 3 Credits

PH-202 Selected Topics: 20th-21st Century Western Philosophy
LASC Categories: HBS, TLC
Addresses a specific topic in 20th-21st Century Western Philosophy. The topic will be indicated in each PH 202 registration listing.
Every 2-3 years. 3 Credits

PH-215 Logic II
LASC Categories: QR
Prerequisites: PH-115
Intermediate symbolic (formal) logic including multi-placed predicates and identity.
Every 2-3 years. 3 Credits

PH-220 Philosophy of Mind
Prerequisites: EN-102
Investigation of the relationship between mental processes and physical states - and implications for such issues as personal identity and free will.
Every 2-3 years. 3 Credits

PH-221 Existentialism and Phenomenology
LASC Categories: GP, TLC
Examines the Existentialist movement of the first half of the 20th Century.
Every 2-3 years. 3 Credits

PH-225 Philosophy of Language
LASC Categories: TLC, ICW
A survey of theories of reference, truth, word and sentence meaning, ordinary language philosophy, embodies communication, and/or dialogic ethics.
Every 2-3 years. 3 Credits

PH-231 Philosophy of Law
LASC Categories: CON, HBS, USW, DAC
Prerequisites: EN-102
Survey of the legal theories and issues and the philosophical bases of key legal and related political concepts.
Every 2-3 years. 3 Credits

PH-240 Political Theory
LASC Categories: USW, TLC
Investigates concepts including political power, equality, revolution, liberties, slavery, socialism and patriarchal power, race and gender.
Every 2-3 years. 3 Credits

PH-241 Genocide and Human Rights
LASC Categories: USW, GP
This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.
Every 2-3 years. 3 Credits

PH-242 Race, Nation, Class, Gender and Sexuality
LASC Categories: USW, HBS
Examines these five important social categories that define the political, legal, economic, and cultural contexts in which we live.
Other or on demand. 3 Credits

PH-250 Global Feminisms
LASC Categories: TLC, GP
Investigates the theoretical underpinnings of women's movements for equal rights around the globe.
Every 2-3 years. 3 Credits

PH-251 Mass Violence Against Women
LASC Categories: USW, GP
A philosophy-based, interdisciplinary course examining historical and contemporary mass violence against women.
Every 2-3 years. 3 Credits

PH-260 Philosophy of Science
LASC Categories: HBS, TLC
Critically investigates such quesions as: What distinguishes sciences from pseudo-sciences? When is a theory confirmed? What is a law of nature?
Every year. 3 Credits

PH-261 Philosophy of Religion
Examination of the roles of faith and reason in beliefs concerning a deiy and in such issues as the problem of evil.
Every 2-3 years. 3 Credits

PH-263 Film and Philosophy
LASC Categories: GP, TLC
An intermediate study of films presenting philosophical ideas about film.
Every 2-3 years. 3 Credits

PH-264 Philosophy of Education
Examines philosophical approaches to education through readings of various authors such as Plato, Rousseau, Wollstonecraft, and Dewey.
Other or on demand. 3 Credits

PH-290 Advanced Special Topics in Philosophy
A treatment of current or special topics for students beyond the introductory level. LASC Categories: Varies by topic. See current course listing for specific LASC area approved.
Every 2-3 years. 3 Credits

PH-301 Individual Figure in the History of Western Philosophy
Prerequisites: EN-102
Studies a specific Western philosopher. The philoopher for a given semester will be indicated in the course registration listings.
Every 2-3 years. 3 Credits

PH-302 Topics in American Philosophy
Prerequisites: EN-102
Treats a selected set of topics in the history of philosophy in the United States.
Other or on demand. 3 Credits

PH-320 Topics in Metaphysics and Epistemology
Prerequisites: EN-102
Selected topics in theories of mind, language, and knowledge.
Other or on demand. 3 Credits

PH-360 Philosophy of History
LASC Categories: USW, GP
Prerequisites: 3 credits from department PH
Explores the different philosophical approaches to the study and writing of history and the nature of historical change and development.
Every 2-3 years. 3 Credits

PH-361 Philosophy of Art
Prerequisites: One semester of philosphy required.
An investigation of the nature of aesthetic experience.
Every 2-3 years. 3 Credits

PH-390 Independent Study in Philosophy
Tutorials in areas of philosophy not covered in normal course offerings.
Fall and Spring and every year. 1-6 Credits

PH-391 Internship in Philosophy
Provides an opportunity for mid-level or advanced students to increase their philosophical knowledge.
3 Credits

PH-408 Directed Study: Philosophy
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Philosophy and Law Minor

Requirements for a Minor in Philosophy and Law

18 credits, including:

PH-231	Philosophy of Law	3
PH-240	Political Theory	3
Select a minimum of one logic course:		3
PH-110	Critical Thinking	
PH-115	Logic I	
Select a minimum of one ethics courses:		3
PH-130	Ethics: Human Conduct & Values	
PH-131	Medical Ethics	
PH-132	Business Ethics	
PH-133	Social and Political Ethics	
Select a minimum of one history of philosophy courses:		3
PH-101	Ancient Western Philosophy	
PH-102	History of Modern Western Philosophy 1600-1800	
PH-201	19th Century European Philosophy	
PH-202	Selected Topics: 20th-21st Century Western Philosophy	
Any elective philosophy course if sixth course is not from one of the lists above.		
Recommended:		3
PH-151	Race, Gender, and the Law	
PH-215	Logic II	
PH-241	Genocide and Human Rights	
PH-251	Mass Violence Against Women	
PH-260	Philosophy of Science	
PH-360	Philosophy of History	
Total Credits		18

Minors should contact the Chair of the Philosophy Department to arrange for departmental advising, and they should select their philosophy courses in consultation with their departmental advisor. Advising can include support for a student's graduate, law, or other professional school application process.

Philosophy Minor

Requirements for a Minor in Philosophy

18 credit, including:

PH-260	Philosophy of Science	3
Select at least one of the following:		3
PH-101	Ancient Western Philosophy	
PH-102	History of Modern Western Philosophy 1600-1800	
PH-201	19th Century European Philosophy	
PH-202	Selected Topics: 20th-21st Century Western Philosophy	
Select 12 credits of PH electives		12
Total Credits		18

Minors should contact the Chair of the Philosophy Department to arrange for departmental advising, and they should select their philosophy courses in consultation with their departmental advisor. Advising can include support for a student's graduate, law, or other professional school application process.

Political Science

Department of History and Political Science

The Political Science program at Worcester State University offers a minor in Political Science and a minor in Pre-Law. Political Science gives students the opportunity to pursue a broad range of questions about the organization and function of government. Students in Political Science programs acquire the analytical skills to ask and answer questions about how and why governments operate in the way that they do. Students can choose to focus on any of the traditional subfields of political science, which include American politics, comparative government, international relations, and political theory. Graduates are prepared to work in a broad array of professional settings, including in traditional career paths such as government service, law, business, journalism, and education; working with community and nonprofit organizations; and involvement in political movements and elected office. Many graduates continue their education to pursue advanced degrees in graduate school or law school.

- Political Science Minor (p. 354)
- Pre-Law Minor (p. 354)

Faculty

Nathan Angelo, Assistant Professor (2016), B.A. Hofstra University; M.A. New York University and City University of New York; Ph.D. New School for Social Research

Joseph Preston Baratta, Associate Professor (1999), B.A. St. John's College; M.A., M.A.T., Ph.D. Boston University

Erika Briesacher, Assistant Professor (2012), B.A. Illinois Wesleyan University; M.A. Southern Illinois University, Edwardsville; Ph.D. Kent State University

Anthony Dell'Aera, Assistant Professor (2016), B.A. Trinity College; M.A., Ph.D. Brown University

Tona J. Hangen, Department Chair, Associate Professor (2008), B.S. Massachusetts Institute of Technology; Ph.D. Brandeis University

Najib E. Saliba, Professor (1971), A.B. Miami University; M.A., Ph.D. University of Michigan

Robert W. Smith, Associate Professor (2007), B.A. Syracuse University; M.A., Ph.D. College of William and Mary

PO-110 American Government
LASC Categories: HBS, USW, CON
This course introduces students to the American political system and thus it will be an exploration of American republican democracy. We will attempt to understand the way that the political system operates by examining Congress, the presidency, the judiciary, federalism, political parties, interest groups, elections, civil liberties and civil rights, and policy issues relevant to Americans. We will explore the way that institutional arrangements facilitate debate, which ultimately leads to policy changes. Our objective in this class will be to understand the workings of American democracy.
Fall and Spring and every year. 3 Credits

PO-150 Foundations of Legal Studies
LASC Categories: HBS, CON
This course introduces the fundamentals of the American legal system. Primary topics will include the sources of law; constitutional interpretation; the roles of the executive, legislative, and judicial branches of government; federal and state judicial systems; civil and criminal law; legal ethics; and questions of power, authority, justice, inequality, individualism, and the community. Students will also learn the fundamentals of legal research, such as locating the texts of statutes, regulations, and court decisions on specific subjects; reading and analyzing statutes and case law; and developing techniques for legal writing and oral presentations.
Fall and Spring and every 2-3 years. 3 Credits

PO-193 First Year Seminar Political Science
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Fall only and every year. 3 Credits

PO-201 International Relations I
LASC Categories: USW, GP, WAC
Prerequisites: PO-101 or HI-103 or HI-104 and EN-102, EN-202 or EN-250.
Theory and practice of international security (realism and internationalism) and international political economy (liberalism and protectionism) in their historical context. [Cross-listed with HI-201.]
Every 2-3 years. 3 Credits

PO-202 International Relations II: Globalization
LASC Categories: USW, GP, WAC
Prerequisites: PO-101 or HI-103 or HI-104 and EN-102, EN-202, or EN-250
The promise and problems of globalization (spread of free market capitalism and political democracy). [Cross-listed with HI-202.]
Every 2-3 years. 3 Credits

PO-209 Ancient and Classical Political Theory
This class introduces students to the ideas and concepts found in the works of ancient and classical political theorists. We will read major works by theorists like Plato, Aristotle, Machiavelli, Locke, Mill, Hobbes, the Federalists, and Rousseau. Emphasis will be placed on how theorists justify the existence of government and how its conception has evolved over time. We then trace fundamental principles, such as democracy, liberty, and justice and show how these ideas are encapsulated in the US Constitution.
Every 2-3 years. 3 Credits

PO-211 History of US Foreign Policy I
LASC Categories: USW
Prerequisites: HI-111 or HI-112
Colonial origins to the era of the Spanish-American War. The sources and development of United States foreign policy in that period. [Cross listed as HI211.]
Every 2-3 years. 3 Credits

PO-212 History of US Foreign Policy II
LASC Categories: USW
Prerequisites: HI-111 or HI-112
From 1900 to recent times; United States foreign policy traditions and the challenges of great power status. [Cross listed as HI212.]
Every 2-3 years. 3 Credits

PO-213 The Modern Presidency
LASC Categories: HBS, USW
This course will examine the evolution of the presidency. Special attention is given to those presidents who have expanded the office.
Every 2-3 years. 3 Credits

PO-215 State and Local Government
LASC Categories: HBS, USW
Examines sub-national governments and politics in the United States; the structure and problems of these governments.
Every 2-3 years. 3 Credits

PO-216 Political Parties & Pressure Groups
LASC Categories: HBS, USW
Examines the organization, functions, and methods of political parties; the role of interest groups in the American political process.
Every 2-3 years. 3 Credits

PO-217 The Legislative Process
LASC Categories: HBS, CON
The nature and function of the United States Congress, including the complexities of the lawmaking process, Congressional elections, the relationship between individual members of Congress and their constituencies, major issues of public policy, and institutional relations between Congress, the Presidency, and the Judiciary.
Alternating and every 2-3 years. 3 Credits

PO-218 US Constitutional History I
LASC Categories: CON, HBS, USW
The development of constitutional history as seen in decisions of the United States Supreme Court and their effects, from 1789 to 1921. [Cross listed as HI218.]
Every 2-3 years. 3 Credits

PO-219 US Constitutional History II
LASC Categories: CON, USW, HBS
Supreme Court decision-making from 1921; Federal-State relations, civil liberties, civil rights, loyalty program, labor, rights of defendants. [Cross listed as HI219.]
Every 2-3 years. 3 Credits

PO-220 Comparative Politics I
LASC Categories: HBS, GP
A comparative study of the politics and governments of Great Britain, West Germany, and the Soviet Union.
Every 2-3 years. 3 Credits

PO-221 Comparative Politics II
LASC Categories: HBS, GP
A comparative study of the political and social systems of South Africa and India, including recent trends in their political development.
Every 2-3 years. 3 Credits

PO-222 Government and Politics of Latin America
The political organization, problems, and possibilities of representative Latin-American countries. Special emphasis will be given to crisis areas.
Every 2-3 years. 3 Credits

PO-223 Political Communication
LASC Categories: TLC
This course will analyze the relationship between citizens' opinions and the mass media through a focus on political campaign and governmental communication strategy. Specific attention will be given to the history of the relationship between politicians and the media. We will also study political campaign advertisements. We will analyze how political candidates and governments communicate with voters, how they shape their images and manage crises, and ultimately attempt to determine how effective politicians are in influencing public opinion.
Every 2-3 years. 3 Credits

PO-230 Campaigns and Elections
LASC Categories: HBS
This course examines political campaigns and elections in the United States, with a focus on the candidate nomination and electoral process, campaign structures and strategies, voting, political participation, public opinion, the media, political behavior, and the role of political parties.
Every 2-3 years. 3 Credits

PO-234 Modern and Contemporary Political Theory
This course will focus on how recent political philosophers have responded to questions such as what constitutes liberty, freedom, and justice. In turn, students will be prompted to consider questions such as when is it necessary for government to constrain freedom, and how can conflicts between the rights of the individual and the rights of the community be adjudicated. This class will allow for engagement with these concepts through the works of modern political theorists such as Marx, Nietzsche, Freud, and Arendt, and contemporary political theorists such as Rawls, Nozick, Dworkin, Berlin and Strauss.
Every 2-3 years. 3 Credits

PO-241 English Constitutional History
LASC Categories: GP, HBS
Development of English Constitution from Magna Carta through revolution, supremacy of Parliament, reform acts, entry into European Union and devolution. [Cross-listed with HI-241.]
Every 2-3 years. 3 Credits

PO-243 City Politics
LASC Categories: HBS, DAC
This course examines the political development and the political processes of America's central cities. The actors in this story include machine bosses, reformers, immigrants, bureaucrats, politicians, average citizens, the rich, and the poor. Particular attention will be given to the political institutions of city government, structures and strategies of city elections, local party organizations, governing strategies of mayors, evolving urban populations and interests, and enduring public policy problems such as poverty, crime, education, and economic decay.
Every 2-3 years. 3 Credits

PO-262 Principles of US Public Policy
LASC Categories: HBS
This course introduces students to how American public policy is formulated and how public policies can be evaluated. These theoretical and structural frameworks are then applied to a series of case studies of public policies to examine the role of politics in how the policy process works and to develop a fuller understanding of the political and ideological debates over contemporary public policy issues such as welfare, social security, heath care, education, labor, criminal justice, and the environment.
Every 2-3 years. 3 Credits

PO-264 American Political Thought
LASC Categories: TLC, USW, DAC
This course examines the evolution of American political thought as a means to better understand the role of political ideology in contemporary politics. Through a close reading of mainly primary source documents in political theory spanning the colonial period through the present era, students will critically engage topics such as American iterations of Republicanism and Democracy, American character, slavery, race, women's rights, ethnicity, class, and immigration. These topics will reveal challenges to core American values which would shape American political development. We will also examine how different varieties of liberals and conservatives confront these political questions.
Every 2-3 years. 3 Credits

PO-265 Racial and Ethnic Politics
LASC Categories: HBS, USW, DAC
This class will analyze the relationship between the United States government and racial and ethnic groups and explore the way that race is utilized in American politics. We will focus on issues affecting racial and ethnic communities in the United States, the politics behind racial and ethnic classification, and the use of racial and ethnic appeals in American political campaigns. The readings for this course will cover topics such as affirmative action, criminal justice reform, and civil rights. It will offer students an opportunity to analyze political speeches and advertisements that utilize race and ethnicity.
Every 2-3 years. 3 Credits

PO-311 Environmental Politics and Policy
LASC Categories: HBS, NSP
Investigation of the factors that determine the formation of public policy on the environment with consideration of the roles played by federal, state, and local regulatory agencies in the United States. Case studies will include global climate change, air and water pollution, energy, land use, brownfields, waste management, endangered species, and population growth.
Alternating and every 2-3 years. 3 Credits

PO-312 Health Politics and Policy
LASC Categories: HBS, ICW
Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States. Topics will include health ethics, insurance, finance, prescription drug regulation, Medicare/ Medicaid, epidemics, private markets, public interest, distributive justice, and the role of government.
Fall and Spring and every year. 3 Credits

PO-320 Citizen Nation
LASC Categories: CON, TLC, USW, DAC, WAC
Prerequisites: HI-111 or HI-112 and EN-102, EN-202 or EN-250
Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria. [Cross-listed with HI-320.]
Other or on demand. 3 Credits

PO-322 Nationalism
Examines the theories fo nationalism, the development of the modern Nation-state, and its effect on global politics. [Cross-listed with HI-322.]
Other or on demand. 3 Credits

PO-323 Empire
Prerequisites: HI-103 and HI-104
Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's. [Cross-listed with HI-323.]
Every 2-3 years. 3 Credits

PO-330 Politics of the Middle East I
Prerequisites: one course from HI-104 HI-105 HI-111 HI-112 PO-101 HI-261 or HI-314
Discusses governments and politics of eastern Arab countries, Turkey, Iran, and Israel. International rivalries in the area are also discussed. [Cross listed as HI330.]
Every year. 3 Credits

PO-331 Politics of the Middle East II
Discusses liberation of North African countries from imperialism; politics of independence, nation-building, and international rivalries in the area.
Every year. 3 Credits

PO-338 History of Political Theory I
The development of political thought from the Greeks to the Enlightenment. [Cross listed as HI338.]
Other or on demand. 3 Credits

PO-339 History of Political Theory II
The development of political thought from the Enlightenment to the present. [Cross listed as HI339.]
Other or on demand. 3 Credits

PO-370 Crisis Politics
Prerequisites: PO-101
Analyze the theories regarding the roots of violence, revolution, and terrorism. Special attention will be devoted to violence in America.
Every 2-3 years. 3 Credits

PO-380 American Foreign Policy Since the Cold War
LASC Categories: CON, USW, HBS
Prerequisites: PO-101 or HI-112 or HI-212
Instruments of American foreign policy; major foreign policy developments since 1947.
Every 2-3 years. 3 Credits

PO-400 Independent Study: Political Science
Special topics for advanced research and study under the guidance of a faculty member.
Fall and Spring and every year. 1-3 Credits

PO-408 Directed Study: Political Science
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring and every year. 3 Credits

PO-440 Internship in Political Science
Internships in museums, archives, government agencies, etc. Performing a variety of tasks at beginning professional level in cooperating institutions.
Fall and Spring and every year. 1-6 Credits

PO-450 Special Topics: Political Science
Selected areas of interest to students and instructors. Topic, prerequisites and instructor are announced in advance.
Other or on demand. 3 Credits

Political Science Minor

Requirements for a Minor in Political Science

PO-110	American Government	3
Political Science electives		15
Total Credits		18

Pre-Law Minor

Requirements for a Minor in Pre-Law

Required Courses		(9 credits)
PO-150	Foundations of Legal Studies	3
Select two of the following:		6
HI/PO-218	US Constitutional History I	
HI/PO-219	US Constitutional History II	
HI-241	English Constitutional History	
Seminar in Constitutional History		(3 credits)
Select one of the following:		3
HI-420	Seminar in American Constitutional History	
HI-421	Seminar in English Constitutional History	
HI-422	Seminar in Ancient Constitutional History	
HI-400	Independent Study in History	
Electives		(9 credits)
9 credits from selected listing or substituted with advisor's Pre-Law permission		9
Total Credits		21

Psychology

Department of Psychology

Psychology courses acquaint students with basic principles of learning, motivation, development, and interpersonal relationships, providing a foundation for effective living and a background for a variety of career opportunities. The major provides students with a wide range of marketable and graduate study skills that include interpersonal awareness, problem-solving, research, and computer literacy.

Baccalaureate degree holders are prepared for entry level positions in a broad range of areas including health and social services, mental health, organizational leadership and management, community relations, education, human resources, program development, public affairs, social science research, and programs for women. Psychology is recognized in Massachusetts as a certificate academic major for Early Childhood and Elementary Education students. Those who major in psychology are able to develop an expertise in one of the Department's areas of concentration: Mental Health Services, or Developmental Process. Those with bachelor's degrees in psychology work in the same fields as do psychologists with graduate degrees. Some of the department's alumni:

- Counsel or teach people in group homes, nursing homes, and clinics
- Are case managers in insurance companies
- Plan and execute research
- Help young people in juvenile courts, schools and recreational programs
- Are behavior specialists
- Counsel drug addicts and victims of abuse

The department provides solid preparation for graduate work in psychology by helping students develop specializations and providing opportunities for the development of excellent research skills. The department offers an HONORS program and an internship program and operates a state-of-the-art computer laboratory. Psi Chi, the national honor society in psychology, is available to outstanding students who major in the discipline.

The **minor** program offers an opportunity for students wishing to develop a core understanding of psychology. The minor is not meant for students whose primary interest is the study of psychology; instead, it is a complement to other fields of study where knowledge of psychology and its methods would be beneficial.

Admission Requirements

Admission is open to any student who is interested in psychology and who can maintain a 2.0 grade point average in the required and elective psychology courses.

Standards for Minimum Academic Performance in the Psychology Major

The Psychology major requires a minimum grade of C- in all courses applied to the major. Courses may be repeated. The C- minimum grade does not apply to psychology courses beyond those applied to the major (four specified, four from specified areas and four elective courses). Students must maintain a minimum overall GPA of 2.0 in the major, consistent with Worcester State University policy.

Concentrations

Students may choose to simply major in psychology **without** a particular specialization (by completing the Requirements for a Major in Psychology) or may choose to major in psychology **with** a specialization by completing the requirements for a concentration in Mental Health Services, or Developmental Processes. They may also specialize by completing the requirements for an Interdisciplinary Concentration in Women's Studies.

Evening Psychology

The required core courses for the Psychology Major may be completed with evening or summer courses. Many core courses are offered in the evening during each academic year as well as some elective courses. Internships and independent study courses, however, are only offered in Fall and spring day courses.

HONORS Program

The HONORS program is designed to increase opportunities for students of outstanding ability to engage in independent work and prepare for more challenging futures. It is especially recommended for students planning to pursue graduate education.

The HONORS project must be completed and presented to the faculty sponsor. Students are required to make an oral presentation on the project in a session open to all faculty and students in the department.

Admission to the HONORS program is by application. The admission requirements, closing date for application and instructions for completing the application process may be obtained from the Department Office.

- Psychobiology Minor (p. 360)
- Psychology Major (p. 361)
- Psychology Major, Concentration in Developmental Processes (p. 363)
- Psychology Major, Concentration in Mental Health Services (p. 363)
- Psychology Major, Interdisciplinary Concentration in Women's Studies (p. 364)
- Psychology Minor (p. 365)

Faculty

Alexandra M. Burgess, Assistant Professor (2017), B.A. Smith College; M.A., Ph.D., University of Hawai'I at Manoa

Amy Cota-McKinley, Professor (2002), B.A. University of Wisconsin, Milwaukee; M.S. Jacksonville State University; Ph.D. Colorado State University

Lori J. Dawson, Professor (1995), B.A. Suffolk University; M.A., Ph.D. State University of New York, Albany

Charles R. Fox, Professor (2013), O.D. New England College of Optometry; B.A., M.A. St. John's University; Ph.D. Brandeis University

Kathryn Frazier, Assistant Professor (2016), B.A. Scripps College; M.A., Ph.D. Clark University

Bernard J. Guarini, Associate Professor (1965), B.S. College of the Holy Cross; M.A. Clark University; M.A., C.A.G.S. Assumption College

Benjamin Jee, Assistant Professor (2015), B.Sc. University of Toronto; Ph.D. University of Illinois, Chicago

Bonnie G Kanner, Department Chair, Professor (1997), B.A., M.S., C.A.S. State University of New York, Albany; Ph.D. Clark University

Ryan E.B. Mruczek, Assistant Professor (2014), B.S. University of Rochester; Ph.D. Brown University

Jacqueline N. Raftery-Helmer, Assistant Professor (2017), B.S., Union College; M.A., Ph.D., Clark University

Nicole Rosa, Assistant Professor (2014), B.A. Stonehill College; M.S.W. Boston College; M.A., Ph.D. Brandeis University

Brandi Silver, Professor (2003), B.S., M.S., Ph.D. Colorado State University

Emily Soltano, Professor (1999), B.A., Ph.D. State University of New York, Albany

Champika K. Soysa, Professor (2003), B.A. Mount Holyoke College; M.A., Ph.D. Clark University

Colleen Sullivan McMullin, Assistant Professor (2012), B.S. Frostburg State University; M.A., Ph.D. University of Maryland, Baltimore

Seth Surgan, Professor (2006), B.A. University of North Carolina, Chapel Hill; M.A., Ph.D. Clark University

Marc J. Wagoner, Associate Professor (2004), B.A. Morehouse College; Ph.D. University of Minnesota

PB-200 Introduction to Psychobiology
LASC Categories: HBS, NSP
Prerequisites: PS-101 and BI-116 or BI-140.
Introductory course in Psychobiology that covers topics including neurobiology, evolution, sensory/motor systems, learning and memory, and social behavior.
Spring only and every year. 4 Credits

PB-400 Capstone in Psychobiology
LASC Categories: CAP
Seminar covering selected topics in Psychobiology including primary source material readings, laboratory activities, discussion, oral presentation and written papers.
Spring only and other or on demand. 2 Credits

PS-101 General Psychology
LASC Categories: HBS
Introduction to history of psychology, scientific method, brain/nervous system, development, learning, motivation, sensation/perception, personality, psychopathology, psychotherapy, cognitive processes, social behavior.
Fall and Spring and every year. 3 Credits

PS-193 Special Topics in Psychology for First Year Students
LASC Categories: FYS
Introductory level course covering topics of sepcial interest to first year students. Offered only as a First Year Seminar.
Fall only and every year. 3 Credits

PS-205 Research Methods
LASC Categories: WAC
Prerequisites: PS-101 and EN102
The design, conduct, analysis and reporting of research are stressed. A broad range of laboratory experiments and demonstrations are conducted.
Every year. 3 Credits

PS-210 Developmental Psychology
LASC Categories: HBS
Prerequisites: PS-101
Physical, social, emotional, intellectual, and moral development from conception to adolescence is examined within a framework of various theories.
Fall and Spring and every year. 3 Credits

PS-222 Introduction to Health Psychology
Prerequisites: PS-101
Introduction to the areas and methods of Health Psychology. Topics include: epidemiology, behavior change, compliance, alternative medicine, healing, chronic illness.
Other or on demand and every year. 3 Credits

PS-224 Positive Psychology
Prerequisites: PS-101
Exploration of the psychology research on a fulfilling and flourishing life including happiness, self-esteem, love, goal setting, mindfulness and spirituality.
Other or on demand and other or on demand. 3 Credits

PS-230 Brain and Behavior
Prerequisites: PS-101. Credit will not be granted for both PS 230 and PS 380
An introduction to the biological basis of behavior.
Fall and Spring and every year. 3 Credits

PS-250 Social Psychology
Prerequisites: PS-101
The psychological dynamics of social interaction including verbal and non-verbal communication, group dynamics and attitude formation and change.
Other or on demand and every year. 3 Credits

PS-252 Applied Social Psychology
Prerequisites: PS-101
Survey of applied social psychology including psychology in educational, organizational, and legal settngs; diversity, environmental, health, media, and consumer issues.
Other or on demand and every year. 3 Credits

PS-254 Persuasion
Prerequisites: PS-101
Explores the areas of persuasion, social influence, and compliance gaining in various situations by utilizing psychological theories/approaches to explain behavior.
Other or on demand and every year. 3 Credits

PS-255 Psychological Foundations of Diversity
Prerequisites: PS-101
Explores the gender, racial/ethnic, multiple-group membership, cultural, social class, religious, disability and sexual orientation facets of diversity.
Other or on demand and every year. 3 Credits

PS-260 Psychology of Human Sexuality
Prerequisites: PS-101.
Sexuality as a foundation of personality. The wide range of human sexuality is explored; sexual development, roles, attitudes and behaviors.
Other or on demand and every 2-3 years. 3 Credits

PS-261 Couples and Family Psychology
Prerequisites: PS-101
Couples and family psychology will be explored, focusing on dating, partnering, separation, divorce, intimacy, sexuality, prenting, and aging families.
Other or on demand and every 2-3 years. 3 Credits

PS-263 Psychology of Women
Prerequisites: PS-101
Women's psychological development throughout the lifespan will be examined, including female development, achievement, stereotyping, stress, violence and psychological disorders.
Other or on demand and every 2-3 years. 3 Credits

PS-270 Drugs and Behavior
Prerequisites: PS-101
This course will explore the effects of psychotropic drugs on the brain and subsequent effects on behavior.
Other or on demand and every year. 3 Credits

PS-275 Psychological Statistics
LASC Categories: QR, QAC
Prerequisites: PS 101 and a passing grade in a college level math or an accuplacer score of 3 or higher
Data tabulation; graphing; measurement of central tendency, variability and correlation; hypothesis testing applied to psychological and sociological data. Hand and computer analysis.
Fall and Spring and every year. 4 Credits

PS-276 Research Methods
LASC Categories: WAC
Prerequisites: PS-101 EN-102 PS-275, and 3 credits in another 200 level Psychology course.
Exploration of psychological research methodologies including: scientific method, design, conduction, analysis, and reporting of research, ethical principles and APA format.
Fall and Spring and every year. 3 Credits

PS-280 Sensation and Perception
Prerequisites: PS-101
Selected sensory and perceptual processes are studied in the context of current theory and research.
Fall and Spring and every year. 3 Credits

PS-295 Special Topics in Psychology
Prerequisites: PS-101
Selected areas of mutual interest to instructor and students. Topics and prerequisites are announced in advance.
Other or on demand and other or on demand. 3 Credits

PS-297 Independent Study: Research in Psych
Prerequisites: PS-101, and PS-275 or PS-276.
Students pursue an area of research interest under faculty supervision. May include assisting fac with ongoing research. Written report required.
Fall and Spring and every year. 1-3 Credits

PS-307 Applied Research Methods
LASC Categories: WAC
Prerequisites: PS-101, PS-205 or PS-276, PS-275 EN-102
Extension of research design and methods introduced in PS-276: Research Methods, including applied research design, statistical analysis, and scientific writing.
Fall and Spring and every year. 3 Credits

PS-310 Development of Exceptional Children/Youth
Prerequisites: PS-101 and PS-210.
Characteristics and needs of children with exceptionalities: including behavior retardation, giftedness, physical or sensory disabilities, emotional or social maladjustments.
Other or on demand and every year. 3 Credits

PS-312 Psychology of Adolescence
Prerequisites: PS-101 and PS-210.
The mental, emotional, social and physical changes of contemporary adolescence are examined with emphasis on family, peer and school influence.
Fall and Spring and every year. 3 Credits

PS-315 Physical and Sexual Abuse
Prerequisites: PS-101
Etiology, characteristics, consequence, treatment and prevention of various forms of physical, sexual and emotional abuse in children, adolescents and adults.
Other or on demand and every 2-3 years. 3 Credits

PS-318 Behavior Management Techniques
Prerequisites: PS-101
Considers the basic concepts of behavior management, including behavior modification for exceptional and normal populations.
Other or on demand and every year. 3 Credits

PS-320 Development of Thinking and Knowing
Prerequisites: PS-101 and PS-210
Spring only and every year. 3 Credits

PS-322 Psychology of Aging
Prerequisites: PS-101 and PS-210.
Adulthood and old age are studied with special emphasis on current developmental theories.
Fall and Spring and every year. 3 Credits

PS-325 Psychology of Learning
Prerequisites: PS-101
Learning as a fundamental concept in understanding behavior; examines principles and theories of learning, emphasizing experimental findings.
Fall and Spring and every year. 3 Credits

PS-330 Theories of Personality
Prerequisites: PS-101
A survey of major theories of personality. Why people behave as they do is explored through the different theories.
Other or on demand and every year. 3 Credits

PS-335 Abnormal Psychology
Prerequisites: PS-101
Etiology, dynamics and treatment of psychopathology and their relation to normal personality are considered from traditional and contemporary perspectives.
Fall and Spring and every year. 3 Credits

PS-340 Introduction to Psychometrics
Prerequisites: PS-101 and PS-275
Methods and instruments used in the evaluation of the psychological attributes of human beings.
Other or on demand and every year. 3 Credits

PS-345 Cognitive Psychology
LASC Categories: WAC
Prerequisites: PS-101 PS-275 PS-276 and EN-102
This course introduces students to areas of cognitive psychology including memory, language processing and decision making.
Fall and Spring and every year. 3 Credits

PS-355 Social and Personality Development
Prerequisites: PS-101 and PS-210.
This course will examine social and personality development from Piagetian, Neo-Piagetian and Sociocultural perspectives.
Fall only and every year. 3 Credits

PS-365 Cultural Psychology
LASC Categories: TLC, HBS, WAC
Prerequisites: PS-101, EN-102, PS-210
This course addresses the role culture plays in human psychological processes and approaches to researching cultural aspects of human action.
Other or on demand and every 2-3 years. 3 Credits

PS-380 Physiological Psychology
Prerequisites: PS-101
Psychobiological problems; current physiological research in emotion, motivation, and learning and the use of physiological methods in psychology.
Other or on demand. 3 Credits

PS-381 Physiology of Behavior
Prerequisites: PS-101. Take PB-200 or PS-230 or PS-380.
The use of physiological methods in physiological research covering topics such as emotion, motivation, sleep, and learning.
Other or on demand and every 2-3 years. 3 Credits

PS-385 Motivation
Prerequisites: PS-101
A study of conditions that arouse, direct and sustain behavior. Topics include: goals, competence, control, arousal, self-esteem, achievement and stress.
Other or on demand and every year. 3 Credits

PS-400 Internship in Psychology
Provides opportunity to advanced students to increase experience through internship with sponsoring community organization, institution, or business under appropriate supervision.
Fall and Spring and every year. 1-3 Credits

PS-405 Independent Study: Topics in Psychology
Prerequisites: PS-101 and PS-275. Take PS-205 or PS-276.
Student will pursue an area of special interest through research or field work under close supervision of a faculty member.
Fall and Spring and every year. 1-3 Credits

PS-407 Independent Study: Advanced Research in Psychology
Prerequisites: PS-101 PS-275 and PS-307. Take PS-205 or PS-276.
Students undertake empirical research under faculty supervision. Written report(s) required.
Fall and Spring and every year. 1-3 Credits

PS-408 Directed Study: Psychology
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

PS-410 Capstone: Seminar in Developmental Psychology
LASC Categories: CAP
Prerequisites: PS-101 PS-210 PS-275 PS-276 and PS-307. Take PS-312 or PS-322 and PS-325 or PS-345. Take PS-230 or PS-380. Take 3 electives from PS-310, PS-318, PS-320, PS-355, PS-400
Patterns of physical, mental and emotional development are explored with emphasis on independent work.
Fall only and every year. 3 Credits

PS-435 Clinical Psychology
Prerequisites: PS-101 and PS-335
Practical issues, methods and techniques of current psychotherapies with emphasis on psychonanalytic, client-centered, and behavioral approaches.
Fall only and every year. 3 Credits

PS-450 Capstone: Contemporary Issues in Psychology
LASC Categories: CAP
Prerequisites: PS-101 PS-275 PS-276 PS-307. Take six courses in the major.
A Capstone course dealing with recent and emerging topics, issues, and methods in psychological science. Content and format varis with instructor.
Fall and Spring and every year. 3 Credits

PS-485 Psychobiology of Mental Disorders
Prerequisites: PS-101. Take PS-230 or PS-380.
Other or on demand and every 2-3 years. 3 Credits

PS-492 Capstone: Seminar in Mental Health
LASC Categories: CAP
Prerequisites: Completed Mental Health Concentration Required PS-330 and PS-335 and PS-340 and PS-435 Take PS-400 or PS-318 or PS-315;
A capstone course dealing with recent and emerging topics, issues, and methods in mental health. Content and format varies with instructor.
Spring only and every year. 3 Credits

PS-495 Special Topics: Psychology
Prerequisites: PS-101
Selected areas of mutual interest to instructor and students. Topics and prerequisites are announced in advance.
Other or on demand. 3 Credits

PS-499 Honors Thesis
Prerequisites: PS-101 PS-276 PS-275 PS-307
Prerequisites or Corequisite: PS-407 or consent of instructor.
Students participate in a seminar, complete an ongoing Honors Project, and prepare a thesis and summary poster for presentation.
Spring only and every year. 1 Credit

Psychobiology Minor

Psychobiology, the study of human and animal biology and behavior, is an interdisciplinary minor consisting of a total of 6-7 classes (18-24 credits), with significant course contributions from both the Biology and Psychology Departments. Students are required to take courses in Biology and Psychology, which will allow them to explore the link between mind, body, and behavior. Introductory courses include both Biology and Psychology, introducing students to the basics of both disciplines. Advanced courses in both disciplines provide an in-depth understanding of the nervous system, evolutionary biology, cellular physiology, and sensation and perception. Students will have the opportunity for hands-on learning to facilitate their understanding of the concepts presented in lecture.

All students are eligible to participate in the Psychobiology minor by following either the General Track or one of two specialized tracks: Biology Major Track or Psychology Major Track. These specialized tracks assure that students who major in Biology and Psychology receive an appropriate breadth of experiences within the field of Psychobiology to complement their chosen major.

Requirements for the Minor in Psychobiology

General Track

(Available to all majors except Biology and Psychology)

Code	Title	Credits
Core		(11 credits)
PS-101	General Psychology	3
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4

Electives		(10-11 credits)
Students must select ONE course from Group A, ONE course from Group B, and ONE course from Group C:		10-11
Group A (200-level)		
PS-280	Sensation and Perception	
BI-200	Human Biology	
Group B (300-level Psychology)		
PS-325	Psychology of Learning	
PS-380	Physiological Psychology	
Group C (300-level Biology w/lab)		
BI-315	Comparative Neurobiology	
BI-360	Animal Behavior	
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		23-24

Biology Major Track (Only available to Biology majors)

Code	Title	Credits
Core/Foundation		(16 credits)
PS-101	General Psychology	3
PB-200	Introduction to Psychobiology	4
PS-280	Sensation and Perception	3
PS-325	Psychology of Learning	3
PS-380	Physiological Psychology	3
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		18

Psychology Major Track (Only available to Psychology majors)

Code	Title	Credits
Core/Foundation		(20 credits)
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4
BI-200	Human Biology	4
BI-315	Comparative Neurobiology	4
BI-360	Animal Behavior	4
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		22

Note: Completing this minor also satisfies the LASC requirements of HBSP, NSP w/ Lab (2x), and the capstone requirement.

Psychology Major

Students may choose to simply major in psychology **without** a particular specialization (by completing the Requirements for a Major in Psychology) or may choose to major in psychology **with** a specialization by completing the requirements for a concentration in Mental Health Services (p. 363), or Developmental Processes (p. 363). They may also specialize by completing the requirements for an Interdisciplinary Concentration in Women's Studies (p. 364).

Requirements for a Major in Psychology

The Psychology major requires successful completion of 12 courses in Psychology. Four of these courses are specific core requirements; four are from specified areas and the remaining four are electives. At least three courses (nine credits) must be at a 300 and/or 400 level, and all three courses must be taken at Worcester State University. The minimum of 37 credits must include the following four core courses:

Required Courses		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select one course each from four of the five different areas		12
Developmental		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
Social Psychology		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
Personality and Abnormal Psychology		

PS-330	Theories of Personality	
PS-335	Abnormal Psychology	
PS-340	Introduction to Psychometrics	
Learning and Cognition		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
Biopsychosocial Processes		
PS-280	Sensation and Perception	
PS-380	Physiological Psychology	
PS-222	Introduction to Health Psychology	
Psychology electives		(12 credits)
Electives - Choose four elective courses from any of the courses in psychology that are not required and are not counted under the four areas.		12
Total Credits		37

Sample Timetable for Completion of Degree: Psychology

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
PS-101	General Psychology	3
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
PS-2XX	PS Major Elective (Not PS-205)	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	15
Year Two		
Semester Three		
PS-2XX	PS Major Elective	3
PS-2XX	PS Major Elective	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	16
Semester Four		
PS-205	Research Methods	3
PS-275	Psychological Statistics	4
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	16
Year Three		
Semester Five		
PS-307	Applied Research Methods	3
PS-1XX+	PS Major Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	15
Semester Six		
PS-1XX+	PS Major Elective	3
PS-1XX+	PS Major Elective	3
PS-1XX+	PS Major Elective	3
PS-1XX+	PS Major Elective	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15
Year Four		
Semester Seven		
LASC/PS	Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
PS-1XX+	PS Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	122

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Psychology Major, Concentration in Developmental Processes

This concentration provides background for students planning careers related to developmental disabilities, special education, child and adolescent services, or hospital and nursing home programs for the disabled or aging. Developmental Process is especially recommended for students in education.

Requirements for a Major in Psychology, Concentration in Developmental Processes

37 to 43 credits.

Required Courses		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select at least four of the following, including one from each of the four different areas:		12
Developmental		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
Social Psychology		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
Personality and Abnormal Psychology		
PS-330	Theories of Personality	
PS-335	Abnormal Psychology	
PS-340	Introduction to Psychometrics	
Learning and Cognition		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
Biopsychosocial Processes		
PS-280	Sensation and Perception	
PS-380	Physiological Psychology	
PS-222	Introduction to Health Psychology	
Concentration in Developmental Processes		(24 credits)
PS-210	Developmental Psychology	3
PS-312	Psychology of Adolescence	3
or PS-322	Psychology of Aging	
PS-325	Psychology of Learning	3
or PS-345	Cognitive Psychology	
PS-380	Physiological Psychology	3
PS-410	Capstone: Seminar in Developmental Psychology	3
Select three of the following electives:		9
PS-310	Development of Exceptional Children/Youth	
PS-318	Behavior Management Techniques	
PS-320	Development of Thinking and Knowing	
PS-355	Social and Personality Development	
PS-400	Internship in Psychology [1]	
Total Credits		49

[1] PS-400 is recommended for any student who has not had an appropriate fieldwork experience.

Psychology Major, Concentration in Mental Health Services

This concentration prepares students for graduate school and/or employment in agencies serving the mental health needs of special populations, including people with mental disabilities, addiction, and cognitive, emotional, and behavioral problems.

Requirements for a Major in Psychology, Concentration in Mental Health Services

40 credits.

In addition to the four core and four area courses in psychology, the following courses are required:

Required Courses		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select at least four of the following, including one from each of the four different areas:		12
Developmental		

PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
Social Psychology		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
Personality and Abnormal Psychology		
PS-330	Theories of Personality	
PS-335	Abnormal Psychology	
PS-340	Introduction to Psychometrics	
Learning and Cognition		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
Biopsychosocial Processes		
PS-280	Sensation and Perception	
PS-380	Physiological Psychology	
PS-222	Introduction to Health Psychology	
Concentration in Mental Health Services		(18 credits)
PS-330	Theories of Personality	3
PS-335	Abnormal Psychology	3
PS-340	Introduction to Psychometrics	3
Select one of the following:		3
PS-400	Internship in Psychology	
PS-318	Behavior Management Techniques	
PS-315	Physical and Sexual Abuse	
PS-435	Clinical Psychology	3
PS-492	Capstone: Seminar in Mental Health	3
Total Credits		43

Psychology Major, Interdisciplinary Concentration in Women's Studies

Requirements for a Major in Psychology, Interdisciplinary Concentration in Women's Studies

15 credits

Psychology majors may elect an interdisciplinary concentration in Women's Studies beyond the requirements of the Psychology major. Five courses may be selected from any course with a "WO" prefix, from at least two disciplines.

Required Courses		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select at least four of the following, including one from each of the four different areas:		12
Developmental		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
Social Psychology		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
Personality and Abnormal Psychology		
PS-330	Theories of Personality	
PS-335	Abnormal Psychology	
PS-340	Introduction to Psychometrics	
Learning and Cognition		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
Biopsychosocial Processes		
PS-280	Sensation and Perception	
PS-380	Physiological Psychology	
PS-222	Introduction to Health Psychology	
Psychology electives		(12 credits)
Electives - At least three courses (nine credits) must be at a 300 and/or 400 level, and all three courses must be taken at Worcester State University.		12
Women's Studies Requirements		(15 credits)
Select 5 courses with a "WO" prefix from at least two disciplines		15
Total Credits		52

Psychology Minor

Students may choose to minor in psychology without a particular specialization (by completing the Requirements for a Minor in Psychology).

Requirements for a Minor in Psychology

The Psychology minor requires successful completion of six courses in Psychology. The minimum 18 credits must include:

PS-101	General Psychology	3
15 credits in Psychology electives		15
Total Credits		18

Sociology

Department of Sociology

The sociology department strives to help its students develop insights about the workings of the social world and the influence of social structure. Its goal involves not just understanding the world, but working to change it. The departmental curriculum aims to help students uncover root causes of social problems and refine their personal understanding of social responsibility and economic justice. The sociology department embraces the goals of personal, community, and global citizenship. Ultimately, the department strives to provide guidance and teaching designed to help students live better lives in an atmosphere of mutual respect.

As a department engaged in public sociology, faculty strive to teach in ways that stress critical thinking joined with action, to advise and mentor students to prepare for lifelong learning and meaningful careers, to encourage students and faculty to collaborate with peers and partners in the community and contribute to the field, and to engage in service to prepare sociology majors to act in complex settings at home and at work, in their communities and the world. The department encourages majors and minors to participate in study away/study abroad activities.

Admission Requirements

Admission to the Sociology major is based on maintaining acceptable grades in the general foundation requirements and interest in the field of sociology. Interested persons may contact the Chair of the Sociology Department for further information. Upon admission, each major is assigned an advisor and receives an orientation in sociology.

- Four Plus One Bachelor of Science in Sociology/ Masters in Non-Profit Management (p. 369)
- Sociology Major (p. 370)
- Sociology Minor (p. 371)

Faculty

Alex Briesacher, Assistant Professor (2015), B.S., Illinois State University; M.A., Southern Illinois University Edwardsville; Ph.D., Kent State University

Sonya Conner, Assistant Professor (2011), B.S. University of Louisiana, Lafayette; M.A., Ph.D. University of Oklahoma

Michelle Corbin, Associate Professor (2011), B.S. Western Michigan University; M.S. Eastern Michigan University; Ph.D. University of Maryland

Aldo V. Garcia Guevara, Department Chair/Sociology, Associate Professor (2006), B.A. University of North Carolina, Asheville; M.A., Ph.D. University of Texas, Austin

Matthew Johnsen, Associate Professor (2007), A.B. Dartmouth College; M.S. New Hampshire College; Ph.D. North Carolina State University

Francisco Vivoni, Assistant Professor (2013), B.A. Universidad Puerto Rico, Rio Piedras; Ph.D. University of Illinois, Urbana

SO-100 Introduction to Sociology
LASC Categories: HBS, ICW
The nature of group behavior and social interaction viewed through analysis of the structure, norms, and values of human groups.
Fall and Spring and every year. 3 Credits

SO-110 Cultural Anthropology
Cross-cultural analysis of the human capacity for adaptation and technological and ideological development. Significant field studies will be examined.
Fall and Spring and every year. 3 Credits

SO-190 Sport and Society
LASC Categories: HBS, USW, DAC
Analysis of sport as a social system. The implication of sport within interrelational contexts of other social systems.
Fall and Spring and every year. 3 Credits

SO-193 First Year Seminar Sociology
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

SO-199 Special Topics in Sociology
Foundations in a selected sub-field of sociology ; announcement made at pre-registration time.
Every 2-3 years. 3 Credits

SO-200 Contemporary Social Problems
LASC Categories: HBS
Analysis of social, political, urban, and industrial changes which have introduced specific problems into contemporary society.
Fall and Spring and every year. 3 Credits

SO-205 Issues in American Society
Prerequisites: SO-100
Identification and analysis of current social issues facing contemporary American society, and critique of policies and programs designed to resolve these issues.
Fall and Spring and every year. 3 Credits

SO-215 Medical Sociology
LASC Categories: HBS, ICW
Prerequisites: SO-100
The structure of health care delivery systems and role interaction between levels of health care personnel, patients, and families of patients.
Fall and Spring and other or on demand. 3 Credits

SO-220 Sociology of the Family
LASC Categories: HBS
Prerequisites: SO-100
A comparative approach to the study of the structure of family systems with emphasis on changing patterns of family life.
Fall and Spring and other or on demand. 3 Credits

SO-228 Latina-Latino Experiences in the U.S. and the World
LASC Categories: TLC, USW, DAC
This course surveys current theoretical approaches used to explain Latina/o experiences and provides an empirical overview of how social institutions affect the daily lives of Latinas and Latinos in the U.S. and the world.
Spring only. 3 Credits

SO-230 Political Sociology
Prerequisites: SO-100
Foundations of social movements in political phenomena, social conditions, and emerging political institutions; the structural basis of social change and politics.
Other or on demand. 3 Credits

SO-235 Music and Social Change
LASC Categories: CA, HBS
Using case studies, social theory and historical materials, this course explores the role of music in social change.
Every 2-3 years. 3 Credits

SO-240 Sociology of Education
Prerequisites: SO-100
Study of modern educational systems, emphasizing the social, political and economic factors that influence its organization and its functions.
Other or on demand. 3 Credits

SO-250 Sociology of Religion
LASC Categories: HBS, ICW, DAC
Prerequisites: SO-100
A cross-cultural comparative study of the nature of religious institutions as systems of socially determined and socially relevant beliefs and practices.
Other or on demand. 3 Credits

SO-255 Sociology of Disability
LASC Categories: HBS, ICW, DAC
Using theory and practical application, this course explores the impact of impairment and disability within a societal context.
Every 2-3 years. 3 Credits

SO-270 Social Theory I
LASC Categories: TLC, CP
Prerequisites: SO-100
Fundamental concepts and intellectual traditions, especially the contributions of Comte, Spencer, Marx, Toennes, Durkheim, and Simmel.
Other or on demand. 3 Credits

SO-275 Social and Behavioral Statistics
LASC Categories: QAC
Prerequisites: SO-100 and any 200 Sociology course. SO 280 recommended
Data tabulation; graphing; measurement of central tendency, variability, and correlation; hypothesis testing applied to psychological and sociological data. Hand and computer analysis. Prerequisite: SO 100 and any 200 Sociology course.
Fall and Spring and every year. 3 Credits

SO-280 Research Methods of Sociology
Prerequisites: SO-100
An analysis of the research function in sociology; the conduct of research appropriate to undergraduate students; the formal presentation of research papers.
Every year. 3 Credits

SO-285 Race, Class and Gender
LASC Categories: HBS, DAC
An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination.
3 Credits

SO-295 Sociology of Death & Dying
LASC Categories: DAC, HBS, ICW
Prerequisites: SO-100
The course explores the sociological concepts and perspectives as they relate to death and dying and how American society deals with illness, dying, death and bereavement.
3 Credits

SO-299 Special Topics: Sociology Concepts, Realities and Representations
Prerequisites: SO-100.
Intermediate level topics.
3 Credits

SO-300 Social Change
Prerequisites: 2 Sociology courses at 200 level, EN-102.
A study of the conditions, patterns, and consequences of social transformation with emphasis on institutional and individual patterns of adjustment and adaptation. Prerequisite: Two sociology courses at 200-level.
Spring only and other or on demand. 3 Credits

SO-305 Applied Sociology and Community Research
Prerequisites: SO-100 SO-280
Every 2-3 years. 3 Credits

SO-310 Formal Organizations
Prerequisites: two Sociology courses at the 200 level
The structure and function of, and communications systems within, formal and complex organizations; primary focus on theoretical aspects of organizations. Prerequisite: Two Sociology courses at 200-level.
Other or on demand. 3 Credits

SO-315 Social Movements
Prerequisites: two Sociology courses at the 200 level
Processes by which new norms and forms of social organization emerge from group behavior, aggregate behavior, and social movements. Prerequisite: Two Sociology courses at 200-level.
Other or on demand. 3 Credits

SO-330 Criminology
Prerequisites: 2 SO courses at 200-level or above.
Theoretical perspective on crime, criminals, and the social aspects of interrelationships within, and between, the components of the criminal justice system. Prerequisites: Two Sociology courses at 200-level.
Other or on demand. 3 Credits

SO-335 Juvenile Delinquency
Prerequisites: two Sociology courses at the 200 level
Social and legal phenomena surrounding youthful offenses and offenders, considered in the context of community response to the problem.
Other or on demand. 3 Credits

SO-340 Social Psychology
Prerequisites: two Sociology courses at the 200 level
Dynamics of small group involvement and other environmental influences on the shaping of an individual's personality. Prerequisites: Two Sociology courses at 200-level.
Other or on demand. 3 Credits

SO-345 Sociology of Deviance
Prerequisites: 2 SO courses at 200-level or above.
The study of the social consequences and apparent causes of deviant behavior through the analysis of the processes of socialization, intra- and inter-group relations, and the social contexts within which deviation is defined. Prerequisites: Two Sociology courses at 200-level.
Spring only and other or on demand. 3 Credits

SO-350 Social Stratification
LASC Categories: HBS, WAC, DAC
Prerequisites: EN 102 and two Sociology courses at the 200-level or above.
Investigation of the recurrent patterns of social differentiation, social ranking, and the unequal distribution of rewards.
Every year. 3 Credits

SO-355 Gender and Sexuality
LASC Categories: HBS, ICW, DAC
This course introduces the sociologist study of gender and sexuality. This course examines how social institutions and cultural norms construct particular gender roles and sexual identities within society.
Every year. 3 Credits

SO-360 Urban Sociology
Prerequisites: 2 SO courses 200-level or above.
A cross-cultural study of urban social systems and the phenomena and problems connected with the planning process. Prerequisites: Two Sociology courses at 200-level.
Other or on demand. 3 Credits

SO-370 Social Theory II
The development of conflict theory and the behavioristic schools theory.
Other or on demand. 3 Credits

SO-375 Contemporary Social Theory
Prerequisites: SO-270
Analytical devices, conceptual schemes, and models used by contemporary theorists with emphasis on structural sociology.
Other or on demand. 3 Credits

SO-390 Sociology of Mental Health
The social definition of mental illness which contributes to social disorder, and its treatment and prevention.
Spring only and other or on demand. 3 Credits

SO-400 Independent Study: Sociology
For advanced sociology majors only; topic to be approved by an independent study advisor. (Requires eight prior courses in sociology.)
Fall and Spring and every year. 1-6 Credits

SO-408 Directed Study: Sociology
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
1-3 Credits

SO-410 Field Work
Data collection based on participant observation within a social service organization; assignment approval by field-work advisor. (Requires eight prior courses in Sociology.)
Fall and Spring and every year. 1-6 Credits

SO-420 Seminar in Sociology
Prerequisites: 9 credits From Department SO; Or permission from instructor.
Advanced study topics in selected areas of Sociology.
Fall and Spring and other or on demand. 1-3 Credits

SO-425 Global Development
LASC Categories: HBS, GP, WAC
Prerequisites: EN-102
This course gives an overview of the field of development and processes of development and underdevelopment in developing countries.
Every 2-3 years. 3 Credits

SO-435 Introduction to Social Enterprise
LASC Categories: HBS, ICW, WAC
Prerequisites: EN-102 and complete at least 60 undergraduate credits.
This course examines social entrepreneurship and social enterprise in a global context.
3 Credits

SO-499 Sociology Capstone
LASC Categories: CAP
Prerequisites: SO-270 SO-275 SO-280 EN-102
This course is an overview of the discipline of sociology, emphasizing the mastery of the discipline at an undergraduate level.
Every year. 4 Credits

Four Plus One Bachelor of Science in Sociology/Masters in Non-Profit Management

Through a combined five year Bachelor of Science in Sociology/Masters in Non-Profit Management program of studies, it is possible for motivated full-time students who are sociology majors to complete a five-year program leading to degrees including both a bachelor's degree in Sociology and a master's in Non-Profit Management.

Students who have completed 90 undergraduate credits may apply for admission into the special five year BS/MS program if they have an overall GPA of not less than 3.0 and a major GPA of not less than 3.25. Students are also required to complete an undergraduate internship, independent study, or capstone project that incorporates work with a community-based organization as part of their undergraduate work. Students must meet all other requirements for admission to the Master in Non-Profit Management. The GRE requirement is waived for students with an overall GPA of 3.25 or higher.

Please also consult the graduate catalog for more information.

In order to complete the joint degree, in the final year of their bachelor's work, students take three graduate level courses (9-11 credits), which are counted toward both the undergraduate and graduate degree requirements. These graduate credits are included in the undergraduate tuition of full-time state supported students. Students must also take at least one summer class between the Spring of their BS graduation and the Fall in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class allows students to complete course requirements for the bachelor's and master's degree in five years (60 months). For more details, students should consult with the graduate coordinator of the program.

Sociology Major

Requirements for a Major in Sociology

30 credits including:

SO-100	Introduction to Sociology	3
SO-270	Social Theory I	3
SO-275	Social and Behavioral Statistics	3
SO-280	Research Methods of Sociology	3
A maximum of two courses at the 100 level		6
A minimum of three courses at the 300 and/or 400 level		9
Total Credits		27

All courses taken beyond the minimum requirements will be credited as electives.

Sample Timetable for Completion of Degree

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I	3
LASC	First-Year Seminar (FYS) (p. 53)	3
SO-100	Introduction to Sociology	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (CON) (p. 49)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
SO	Any 100 or 200 level course in major	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (HBS) (p. 56)	3
	Credits	16
Year Two		
Semester Three		
SO-270	Social Theory I	3
SO-280	Research Methods of Sociology	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15
Semester Four		
SO-275	Social and Behavioral Statistics	3
SO-2XX	SO Major Elective	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Year Three		
Semester Five		
SO-3XX+	SO Major Elective	3
SO-1XX+	SO Major Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
	Credits	15
Semester Six		
SO-3XX+	SO Major Elective	3
SO-1XX+	SO Major Elective	3
LASC	LASC Elective (TLC) (p. 63)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
SO-499	Sociology Capstone (or LASC Capstone)	4

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	16

Semester Eight

SO-3XX+	SO Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	122

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Sociology Minor

Requirements for a Minor

18 credits including:

SO-100	Introduction to Sociology	3
SO-200	Contemporary Social Problems	3
Select at least 12 credits of electives		12
Total Credits		18

All prerequisites for 300 and 400 level courses must be met if the student wishes to elect courses at these levels.

Theatre

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts (p. 253), one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts.

Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Minor in Theatre

(See Visual and Performing Arts Department (p. 253) for a complete listing of requirements and courses.)

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least ones stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

Visual and Performing Arts

Department of Visual and Performing Arts

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

- Art Minor (p. 253)
- Composition and Music Technology Minor (p. 267)

- Music Minor (p. 266)
- Theatre Minor (p. 267)
- Visual and Performing Arts and Education, Double Major (p. 264)
- Visual and Performing Arts Major (p. 263)

Michael C. Hachey, Professor (1993), B.F.A., M.F.A. Massachusetts College of Art

Stacey Parker, Associate Professor (2007), B.F.A. Alfred University; M.F.A. Rochester Institute of Technology

Amaryllis Siniossoglou, Professor (2005), PEP Royal College of Art, London; M.F. A. University of Massachusetts, Amherst; Ecole Nationale Superieure Des Beaux-Arts, Paris; Diplome Superieur d' Art Plastique; School of Art, Athens; Certificate, Drawing and Painting School

Catherine Wilcox-Titus, Professor (2004), B.A. University of Toronto; M.S. Simmons College; M.A., Ph.D. Boston University

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A. Eastman School of Music

Christie B. Nigro, Professor (1989), B.M. Syracuse University; M.M Yale University; Ph.D. University of Massachusetts

Robert Sahagian, Professor (1968), B.M. New England Conservatory of Music; M.M., Ph.D. Michigan State University

John H. Hood, Professor (2004), B.F.A. Arizona State University; M.F.A. University of Minnesota

Sam O'Connell, Associate Professor (2010), B.A., M.A. Washington University; Ph.D. Northwestern University

Adam Zahler, Department Chair, Professor (2007), B.A. University of Vermont; M.F. A. University of Virginia

Art Courses

AR-100 Cross Media Studio
LASC Categories: CA, TLC
An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.
Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation
This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.
Fall and Spring and every year. 3 Credits

AR-112 World Art Survey I
LASC Categories: CA, TLC, DAC
Surveys the world's major cultural achievements in the visual arts from the prehistoric period to ca. 1400.
Every year. 3 Credits

AR-113 World Art Survey II
LASC Categories: CA, TLC, DAC
Major cultural achievements in the visual arts from ca 1400 to the early twentieth century.
Every year. 3 Credits

AR-117 Visual Design: 2 Dimensions
LASC Categories: CA
A foundation for visual literacy through studio work utilizing such art elements as line, form, color, and texture.
Fall and Spring and every year. 3 Credits

AR-118 Global Art History
LASC Categories: GP, WAC, DAC
Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.
Every year. 3 Credits

AR-122 Visual Design: 3-DIMENSIONS
LASC Categories: CA
A foundation for visual literacy through studio work utilizing spatial elements such as plane, mass, volume, and structure.
Fall only and every year. 3 Credits

AR-123 Design Fundamentals
LASC Categories: CA, QAC
Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibbonaci series, fractals, regular solids.
Fall and Spring and every year. 3 Credits

AR-130 Painting I
LASC Categories: CA
An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression
Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals
LASC Categories: CA, GP, DAC
The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.
Fall and Spring and every year. 3 Credits

AR-150 Life Studio I
LASC Categories: CA
Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.
Fall and Spring and every year. 3 Credits

AR-160 Sculpture I
LASC Categories: CA, GP, WAC
Prerequisites: EN-102
Three-dimensional studio creations through a variety of traditional and contemporary materials. Both realistic and abstract concepts are explored.
Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms
LASC Categories: CA, GP, WAC, DAC
Prerequisites: EN-102
A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.
Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art
3 Credits

AR-193 First Year Seminar in Art
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

AR-200 History of American Art
LASC Categories: CA, TLC
A survey of the visual arts in the United States, from the Colonial Period to the present.
Spring only and other or on demand. 3 Credits

AR-210 Drawing and Painting Studio
LASC Categories: CA
This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.
Fall and Spring and every year. 3 Credits

AR-220 Foundations of Modern Art
LASC Categories: TLC, CA
Influential 19th Century developments, such as Romanticism, Realism, and Impressionism, are discussed in relationship with early 20th Century art.
Fall and Spring and every 2-3 years. 3 Credits

AR-225 Art Since Mid-20th Century
LASC Categories: CA, GP, WAC, DAC
Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.
Fall only and every year. 3 Credits

AR-230 Printmaking
LASC Categories: CA
Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.
Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio
LASC Categories: CA, GP
This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage and use historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.
Fall and Spring and every year. 3 Credits

AR-240 Watercolor
LASC Categories: CA, TLC
A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.
Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools
LASC Categories: CA
An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.
3 Credits

AR-270 Driftwood to Dumpsters
LASC Categories: CA, TLC, WAC
Prerequisites: EN-102
Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.
Every 2-3 years. 3 Credits

AR-275 Gallery and Museum Studies
LASC Categories: CA, TLC
All aspects of installation and exhibition of art work in WSU gallery, including solicitation of art, publicity, display, and management.
Every 2-3 years. 3 Credits

AR-285 History of Photography
LASC Categories: CA, TLC
The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]
Every 2-3 years. 3 Credits

AR-300 Painting II
Prerequisites: AR-130 or consent of instructor.
Continuation of painting with emphasis on individual development through interpretive projects.
Spring only and every 2-3 years. 3 Credits

AR-302 Drawing II
Prerequisites: AR-140 or consent of instructor
Advanced projects in drawing with increasing emphasis on individual direction.
Fall and Spring and every 2-3 years. 3 Credits

AR-306 Sculpture II
Prerequisites: AR-160 or consent of instructor.
Further exploration of sculptural form with a diversity of materials, techniques, and expressive meaning.
Spring only and every 2-3 years. 3 Credits

AR-330 Intermediate Printmaking
Prerequisites: AR-230
Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.
Every year. 3 Credits

AR-350 Special Topics in Art
Prerequisites: one studio course or consent of instructor.
A course covering topics which vary in response to specific student and faculty interest.
Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art
An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.
Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone
LASC Categories: CAP
Students research, design, and create their work for public presentation and evaluation by a faculty board of review. This is the final course in the Art Major and is a requirement for all the majors.
Spring only and every year. 3 Credits

Music Courses

MU-100 Music Fundamentals
LASC Categories: CA
An introduction to the rudiments of music theory, including pitch and rhythmic organization. Emphasis is placed on intervals, major and minor scales, reading and writing rhythm, and chord structures.
Fall and Spring and every 2-3 years. 3 Credits

MU-101 Fundamentals of Music and Aural Skills
LASC Categories: CA
An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.
Every year. 3 Credits

MU-102 Applied Music
Prerequisites: Audition required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and every year. 1 Credit

MU-104 Class Piano
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano technique and pedagogy in a group setting of 12 or fewer
Fall and Spring and every year. 1 Credit

MU-106 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation
LASC Categories: CA
General survey of masterpieces of major composers of various periods in history of music.
Fall and Spring and every year. 3 Credits

MU-120 Ear Training
Prerequisites: MU-100 or MU-101
An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfege.
Every year. 3 Credits

MU-125 Jazz Appreciation
LASC Categories: CA, TLC
Surveys the history of jazz beginning with the earliest roots in the American South to today.
Every year. 3 Credits

MU-140 World Music
LASC Categories: CA
An introducation to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.
Spring only and every 2-3 years. 3 Credits

MU-150 Opera
Analysis of the masterworks of the standard operatic repertoire.
Spring only and every year. 3 Credits

MU-175 Music in America
Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.
Other or on demand. 3 Credits

MU-185 Composition I
LASC Categories: CA
Prerequisites: MU-100 or MU-101
An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.
Spring only and every year. 3 Credits

MU-190 Piano Class
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano proficiency. Class topics will include an introduction to the keyboard, hand position, and music theory. Solo literature appropriate to the level will be studied.
1 Credit

MU-193 Special Topics in Music:First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

MU-195 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Every year. 1 Credit

MU-200 Issues in Music
This course deals with topics of special interest, in both seminars and studio environments at an introductory level.
3 Credits

MU-202 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I
LASC Categories: CA
Prerequisites: MU-100 or 101.
Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.
Spring only and other or on demand. 3 Credits

MU-208 Music Software
Prerequisites: MU-100 or MU-101
A survey of music software including Finale, Sibelius, Logic, GarageBand and other current applications. Students will explore the features of each program relative to notation, composition, arranging, and recording.
Every year. 3 Credits

MU-210 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Analysis and application of harmonization techniques using diatonic and chromatic chords. Emphasis is placed on voice-leading, non-chord tones, secondary chords, and modulation.
Other or on demand. 3 Credits

MU-213 Music Technology of MIDI Systems and Digital Audio
Prerequisites: MU-100 or knowledge of notation and department consent.
Offers study in MIDI/Digital Audio Systems and electronic music synthesis in a Macintosh environment. Prepares student interested in audio engineering.
Fall only and every year. 3 Credits

MU-215 Chorus and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.
Fall and Spring and every year. 3 Credits

MU-220 Chorus
LASC Categories: CA
Prerequisites: MU-215
Mixed Chorus repertoire. May be repeated.
Fall and Spring and every year. 1 Credit

MU-222 African Drumming
LASC Categories: GP, CA, DAC
An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.
Every year. 3 Credits

MU-225 Band
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in repertoire and performance. May be repeated.
Fall and Spring and every year. 0.5-1 Credits

MU-226 Band and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in music notation and style of instrumental music. Participation in college band required.
Fall and Spring and other or on demand. 3 Credits

MU-228 Piano Ensemble
LASC Categories: CA
Prerequisites: MU-102 or MU-190
A small ensemble for keyboard players who will learn, explore, and perform four- hand piano repertoire.
Every year. 1 Credit

MU-231 Women in Music
LASC Categories: CA, TLC
A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.
3 Credits

MU-234 Music of the Baroque Period
The period of 1600-1750 with emphasis on Bach and Handel.
Fall and Spring and other or on demand. 3 Credits

MU-235 Music of the Classical Period
The period 1750-1827; Haydn, Mozart and Beethoven.
Fall and Spring and every year. 3 Credits

MU-237 Music in the Elementary School
LASC Categories: CA
Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.
Other or on demand. 3 Credits

MU-240 Music of the Romantic Period
An examination of Nineteenth Century music, beginning with Beethoven. [MU 140]
Fall and Spring and every 2-3 years. 3 Credits

MU-245 20th Century Music
A comprehensive study and general listener's approach to contemporary music beginning with Impressionism.
Spring only and every 2-3 years. 3 Credits

MU-250 Music of the Cinema:Spectacle, Splendor, And Spielberg
LASC Categories: CA, TLC
An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.
Spring only. 3 Credits

MU-255 The Golden Era of Piano Music
LASC Categories: CA
A survey of piano music beginning with Beethoven and continuing through the Romantic tradition to the early twentieth century.
Every 2-3 years. 3 Credits

MU-260 Symphonic Music
LASC Categories: CA
A survey of symphonic music beginning with the Classical Period.
Spring only and every 2-3 years. 3 Credits

MU-265 The Concerto
LASC Categories: CA
The concerto from the eighteenth to the twentieth century with emphasis on the development of the piano concerto.
Spring only and every 2-3 years. 3 Credits

MU-270 Music in Horror Films
A survey of scores composed for horror films. Emphasis is placed on the role of music in the genre and the composer's interpretation of various components of screenplays, including narrative, characters, and emotional content.
Every 2-3 years. 3 Credits

MU-275 Computers and Music
Prerequisites: MU-205
An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance, Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.
Other or on demand and other or on demand. 3 Credits

MU-280 History of Music
A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.
Fall and Spring and every year. 3 Credits

MU-281 Music History I
LASC Categories: CA
A general historical survey of Western art music from the Medieval, Renaissance, and Baroque Periods.
Every year. 3 Credits

MU-282 Music History II
LASC Categories: CA
A general survey of Western art music from the Classical and Romantic Periods, and the Twentieth Century.
Every year. 3 Credits

MU-285 Composition II
Prerequisites: MU-185 or MU-204, and MU-205.
A continuation of Composition I. Students will explore methods of tonal composition Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.
Fall and Spring and every year. 1 Credit

MU-300 Chorale
LASC Categories: CA
Prerequisites: Audition Required
Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated.
Every year. 1 Credit

MU-302 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall only and every year. 1 Credit

MU-305 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.
Fall only and every year. 3 Credits

MU-310 The American Musical in Performance
Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.
Every 2-3 years. 3 Credits

MU-321 Small Ensemble
LASC Categories: CA
The performance of musical works by a small ensemble. By permission of instructor or audition.
Fall and Spring and every year. 0.5-1 Credits

MU-375 Sound Synthesis
Prerequisites: MU-275
A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-380 Form and Analysis
Prerequisites: MU-210
An introduction to and analysis of the formal structures of music.
Fall and Spring and every year. 3 Credits

MU-385 Composition III
Prerequisites: MU-285 and MU-305.
An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter, This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.
Fall and Spring and every year. 1 Credit

MU-400 Independent Study in Music
Prerequisites: Consent of Instructor
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall and Spring. 1 Credit

MU-408 Directed Study: Music
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

MU-410 Special Topics in Music
This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio enviorments.
3 Credits

MU-485 Composition IV
Prerequisites: MU-385
Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.
Other or on demand. 1 Credit

Theatre Courses

TH-145 Acting I
LASC Categories: CA
Introductory acting theory and practice. Students present brief monologues and scenes in class.
Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre
LASC Categories: CA
An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.
Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

TH-226 Script Analysis
LASC Categories: CA, TLC, DAC
Script analysis for theatre artists. How to take a script from initial reading to production.
Every 2-3 years. 3 Credits

TH-236 History of Theatre I
LASC Categories: CA, TLC
Survey of world theatre from Golden Age of Athens to Restoration England including brief overview of Asian theatre.
Fall and Spring and every 2-3 years. 3 Credits

TH-237 History of Theatre II
LASC Categories: TLC, GP, DAC
Survey of western theatre from Eighteenth to Twentieth Century, with reference to roots and development in other world cultures.
Fall and Spring and every 2-3 years. 3 Credits

TH-246 Voice and Movement
Prerequisites: TH-191 and TH-245
Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.
Every year. 3 Credits

TH-270 History of American Entertainment I
LASC Categories: CA, USW
An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.
Every year. 3 Credits

TH-271 History of American Entertainment II
LASC Categories: CA, USW
An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.
Every year. 3 Credits

TH-272 History of Costume
LASC Categories: CA
The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.
Every 2-3 years. 3 Credits

TH-275 Introduction to Stagecraft and Design
LASC Categories: CA
Basic theories of scenic, costume, and design with practicum.
Other or on demand. 3 Credits

TH-290 Theatre for Young Audiences
LASC Categories: ICW, CA, DAC
Organization of children's theatre, script selesction, visual design, rehearsal and performance.
Investigation of creative drama as a teaching tool in elementary education.
Spring only and other or on demand. 3 Credits

TH-292 Creative Dramatics
LASC Categories: CA, ICW
Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.
Every year. 3 Credits

TH-321 Rehearsal and Performance
LASC Categories: CA
Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.
Spring only and every year. 3 Credits

TH-345 Acting II
Prerequisites: TH-191 TH-245
Further development of acting skills with emphasis on stage-acting technique.
Every year. 3 Credits

TH-348 Stage Combat
LASC Categories: CA, ICW
Prerequisites: TH-191
Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.
Every year. 3 Credits

TH-355 Theatre Practicum
Practical work on Theatre production in various areas including acting, design, stage management, construction, etc.
Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre
LASC Categories: CA
Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.
Every year. 3 Credits

TH-370 Costume Design for Theatre
LASC Categories: CA
Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.
Every year. 3 Credits

TH-380 Directing
Prerequisites: TH-245 and TH-191
Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.
Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre
LASC Categories: CA
Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.
Every year. 3 Credits

TH-399 Special Topics in Theatre
Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).
Other or on demand and other or on demand. 3 Credits

TH-408 Directed Study: Theatre
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Visual and Performing Arts Courses

VP-155 First Year Practicum
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.
Spring only and every year. 1 Credit

VP-191 Special Topics
Introductory course to cover various topics
3 Credits

VP-193 Special Topics in Visual and Performing Arts: First-Year Students
LASC Categories: FYS
Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.
Every year. 3 Credits

VP-200 Critical Thinking in the Arts
LASC Categories: CA, TLC, DAC, QAC
The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.
Every year. 3 Credits

VP-210 Contemporary Dance Styles I
LASC Categories: CA
The study and movement of dance vocabularies in one or more contemporary and modern styles.
Every year. 3 Credits

VP-255 Second Year Practicum
Prerequisites: VP-155
Students will put into practice interdisciplinary concepts, ideas, and techniques at a exploratory level.
Spring only and every year. 1 Credit

VP-300 Interdisciplinary Arts Seminar
Prerequisites: VP-200
Examines examples of contemporary modes of collaborative, interdisciplinary, and cross-disciplinary works of music, theatre, and visual art.
Fall only and every year. 3 Credits

VP-310 Contemporary Dance Styles II
LASC Categories: CA
Prerequisites: VP-210
The study and movement of contemporary dance vocabularies at the intermediate to advanced level.
Every year. 3 Credits

VP-355 Third Year Practicum
Prerequisites: VP-155 and VP-255
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.
Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory
Prerequisites: VP-200
An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.
Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice
Prerequisites: VP-364
Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.
Spring only and every year. 3 Credits

VP-375 Special Topics
A course that varies according to specific student and faculty interest.
Other or on demand. 3 Credits

VP-400 Arts Capstone/Senior Thesis
LASC Categories: CAP, WAC
Prerequisites: VP-200 VP-300 EN-102
Students research, design, and create works of art, music, and theatre for public presentation and evaluation by a faculty board of review.
Every year. 3 Credits

VP-405 Independent Study in the Arts
Prerequisites: Permission of Instructor
An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.
Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

VP-410 Special Topics in the Arts
Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]
Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts
Advanced students gain practical experience in a working arts environment.
Fall and Spring and every year. 3-12 Credits

Visual and Performing Arts Major

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

Students who select a VPA Major also select a concentration in Art, Music or Theatre. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students must complete the foundation courses plus the course required for a concentration in Art, Music or Theatre.

Requirements for a VPA Major – Foundation Courses

Minimum requirement for the major is completion of a three course (9 credit) Foundation curriculum, a three course (9 credit) Interdisciplinary Core, and 27 credits in one of three concentrations. Students will declare a concentration in Art, Music, or Theatre.

Interdisciplinary Foundation Courses		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Total Credits		18

Visual and Performing Arts and Education, Double Major

Students who double major in Early Childhood or Elementary Education may concentrate in Art, Music, Theatre, or Visual and Performing Arts. They will fulfill the Interdisciplinary Foundation and Core requirements plus requirements in their concentration for a total of 36 credits.

Requirements for an Emphasis in Art for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Art for Students who double major in Early Childhood or Elementary Education		(18 credits)
Art History		
Select one of the following:		3

AR-112	World Art Survey I	
AR-113	World Art Survey II	
AR-225	Art Since Mid-20th Century	
Studio Art		
AR-117	Visual Design: 2 Dimensions	3
AR-122	Visual Design: 3-DIMENSIONS	3
AR-140	Drawing Fundamentals	3
Art Pedagogy		
AR-260	Visual Arts in the Schools	3
Electives		
Art electives		3
Total Credits		36

Requirements for an Emphasis in Music for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Music for Students who double major in Early Childhood or Elementary Education		(18 credits)
Music Theory		
MU-101	Fundamentals of Music and Aural Skills (Unless taken as foundation)	3
or MU-205	Music Theory I	
Music Literature		
Select one of the following:		3
MU-115	Music Appreciation (Unless taken as foundation)	
MU-281	Music History I	
MU-282	Music History II	
Applied Music (Lessons and Ensembles)		
Select one of the following:		2
MU-102	Applied Music (1 credit each)	
MU-104	Class Piano	
Participation in two Ensembles at .5 credits each		1
Music Pedagogy		
MU-237	Music in the Elementary School	3
Electives in Music		
Electives		6
Total Credits		36

Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
Theatre Pedagogy		
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Performance and Production		
TH-145	Acting I	3

TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Electives in Theatre		
Electives		3
Total Credits		36

Requirements for an Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
AR-260	Visual Arts in the Schools	3
MU-237	Music in the Elementary School	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Electives in Art, Music, Theatre, and Visual and Performing Arts		
Electives		6
Total Credits		36

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art related courses, including a minimum of three credits in art history and at least one art course at the 300-level.

SELECT	AR Electives	12
SELECT	Art History Elective	3
SELECT	AR Elective 300+	3
Total Credits		18

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music minor, students complete courses in the performance, history, composition, and theory of music, and also in applied music. Students must audition for applied music spots. Students are provided with opportunities to perform in ensembles as well as take a wide variety of classroom courses to enhance musical understanding and literacy.

Requirements for a Minor in Music

18 credits in music with 3 credits are required in each of the following:

Music Theory		(3 credits)
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-205	Music Theory I	
Music History		(0 credits)
SELECT	Music History (MU 115 Music Appreciation or historical period courses)	
Applied Studies		(3 credits)
private lessons or ensembles		3
Electives		(9 credits)
9 credits in music electives		9
Total Credits		15

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Students choose courses based on personal interest from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least ones stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-275	Introduction to Stagecraft and Design	3

TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

Urban Studies

Department of Urban Studies

The goal of the Department of Urban Studies is to foster an understanding of the complex challenges that face an increasingly urban and metropolitan world. The field of Urban Studies uses an interdisciplinary approach to understand metropolitan life. It immerses students in an academically rigorous and personally challenging course of study that helps them discover who they are, and how they can become change agents in this global society. The Urban Studies Department cultivates the development of critical thinking skills necessary to function effectively in today's competitive world. Department graduates enjoy outstanding careers in a wide variety of occupations, such as, public administration, policy development, non-profit management, urban planning, business, law, human services, health care management, housing management, gerontology and social work.

- Four Plus One Bachelor of Science in Urban Studies / Master of Science in Non-Profit Management (p. 391)
- Intergenerational Studies and Community Service Minor (p. 392)
- Urban Studies Major (p. 392)
- Urban Studies Major, Concentration in Gerontology (p. 393)
- Urban Studies Major, Concentration in Intergenerational and Community Service (p. 393)
- Urban Studies Major, Concentration in Public Administration and Planning (p. 394)
- Urban Studies Major, Concentration in Social Work and Social Policy (p. 394)
- Urban Studies Minor (p. 395)

Faculty

Madeline Campbell, Assistant Professor (2012), B.A., M.A. Brown University; M.A., Ph.D. University of California, Davis

Thomas E. Conroy, Department Chair, Associate Professor (2010), B.A. Salem State University; M.A., Ph.D. University of Massachusetts, Amherst

Anne W. Gathuo, Professor (2005), B.Ed. Kenyatta University; M.B.A. University of Nairobi; Grad Certificate, M.S., Ph.D. University of Massachusetts, Boston

Timothy E. Murphy, Assistant Professor (2013), B.A. Indiana University; M.A., Ph.D. University of California, Davis

Adam Saltsman, Assistant Professor (2016), B.A. Colby College; M.A., Ph.D. Boston College

UR-101 Introduction to Urban Studies
LASC Categories: USW, HBS
A broad contextual overview of urban life that examines from a systems perspective the relationship of man and his environment.
Fall and Spring and every year. 3 Credits

UR-103 Introduction to Women's Studies
LASC Categories: DAC, ICW, HBS
This course uses a variety of academic disciplines to study the situation of women around the world.
Every year. 3 Credits

UR-191 Special Topics
Introductory course to cover various topics
3 Credits

UR-193 First Year Seminar Urban Studies
LASC Categories: FYS
Every year. 3 Credits

UR-201 Analysis of Urban Systems
LASC Categories: HBS
Analysis of activities, programs, and policies designed to sustain and enhance the livability of an urban environment.
Other or on demand. 3 Credits

UR-212 American Metropolitan Evolution
LASC Categories: USW, WAC
Prerequisites: UR-101 and EN-102
Development of metropolitan America from a multi-disciplinary approach with emphasis upon dynamics of urban growth, internal development of cities, immigrations, socio-economic stratification, metropolitanization, and problems deriving from growth.
Fall and Spring and every 2-3 years. 3 Credits

UR-213 Human Identity and Urban Environment
Prerequisites: UR-101
Study of factors affecting identity in contemporary urban settings including race, ethnicity, class, age, and sex categories and roles.
Spring only and every year. 3 Credits

UR-216 Woman and Aging in the Urban Enviroment
LASC Categories: HBS, WAC
Prerequisites: EN-102
Investigation of the Aging process for women in urban society, focusing on their great longevity, lower income status, and major care giving role.
Fall and Spring and every 2-3 years. 3 Credits

UR-230 Technology, Public Policy and Urban Society
LASC Categories: HBS, WAC
Prerequisites: EN-102
Examination of high-technology and its impact on urban society in areas such as provacy, ethics, intellectual property rights, sense of community, and access to information and services.
3 Credits

UR-240 Introduction to Qualitative Research Methods for the Social Sciences
LASC Categories: HBS, WAC
Prerequisites: EN-102
This introduction course provides and overview of the research process, and introduces students to commonly used qualitative methods in the social sciences.
Every year. 3 Credits

UR-245 Introduction to Survey Research Method For Social Science
LASC Categories: HBS
This introductory course provides an overview of the research process and introduces students to survey research methodology.
Every year. 3 Credits

UR-250 Introduction to Urban Planning
LASC Categories: ICW
An exploration of planning theory, dynamics, and practice, and how they form the modern urban planning agenda.
3 Credits

UR-290 Gender and the City
LASC Categories: WAC, GP, HBS
Prerequisites: EN-102
Exploration of the ways in which gender, both male and female, structures responses of individuals to urban life and spaces.
Every 2-3 years. 3 Credits

UR-301 Cities and Suburbs
Prerequisites: UR-101
Multi-disciplinary study of city and suburban growth patterns and problems both of the past, and that hamper metropolitan cooperation and affect the quality of life for city and suburban residents and businesses.
Every 2-3 years. 3 Credits

UR-305 Group Conflict in the Urban Community
Prerequisites: UR-101
Study of conflict and its resolution in contemporary urban settings. Personal, small group, and societal strategies for conflict resolution will be explored.
Fall and Spring and every 2-3 years. 3 Credits

UR-306 Interviewing and Counseling Techniques
Investigation of skills and process of interviewing and counseling with emphasis upon theory and practice, participant exercises, and development of helping skills and effective counseling relationships.
Every 2-3 years. 3 Credits

UR-310 Power, Politics and Decision-Making in Urban Communities
Prerequisites: UR-101
Exploration from multi-disciplinary approach of social power and its relation to decision-making in urban communities. Emphasis on theories of power, understanding research methodologies, and policy implications.
Every 2-3 years. 3 Credits

UR-311 Urban Politics and Policies
LASC Categories: HBS
Prerequisites: UR-101
Political behavior and perceptions in cities and towns from a multi-disciplinary perspective with emphasis on how policy is initiated, developed, and implemented in various governmental forms.
Spring only and every 2-3 years. 3 Credits

UR-320 Human Needs and Social Policy
LASC Categories: ICW
Analysis of human needs as they change over a life span; why needs go unmet, and the role of human services in meeting needs.
Every 2-3 years. 3 Credits

UR-321 Social Work in the Urban Society
Prerequisites: UR-101
Overview of approaches used by social work professionals in assessing and meeting needs, including casework, community organization, and planning.
Other or on demand. 3 Credits

UR-330 Justice in the Urban Society
Prerequisites: UR-101
Theoretical perspectives on the mission of the criminal justice system and the daily operation of its sub-components.
Other or on demand. 3 Credits

UR-331 Crime and the City
LASC Categories: HBS
Prerequisites: UR-101
Investigation of crime in contemporary urban society and the social, legal, economic, and cultural strategies for dealing with crime and deviance.
Other or on demand. 3 Credits

UR-340 Urban Housing Dilemma
Prerequisites: UR-101
Analysis of the factors that shape the nature, location, and supply of urban housing with special focus on federal policies and the housing needs of elders.
Every 2-3 years. 3 Credits

UR-344 A Society for All Ages: Intergenerational Community Service
Exploration of the necessary role of community service in civic life with emphasis on harnessing the power of intergenerational programs to address social concerns.
Every year. 3 Credits

UR-350 Urban Youth in American Society
Prerequisites: UR-101
Role and problems of youth in urban societies viewed from a variety of social science perspectives with additional employment of contemporary music and literature.
Other or on demand. 3 Credits

UR-351 Public Policy and Youth Services
Prerequisites: UR-101
Role of theory, attitudes, and public opinion in the formation of policies concerning delinquency with exploration of current practices and innovative strategies.
Every 2-3 years. 3 Credits

UR-352 Policy Planning for an Aging Society
Analysis of current social policies in regard to elders and exploration of ways in which policies need to be altered to meet growing elder needs.
Spring only and every year. 3 Credits

UR-353 Aging in a Global Society
LASC Categories: GP, DAC
Explores the ramification of unrelenting Global Aging, focusing on the questions, what are old people for and the connections across generations.
Every 2-3 years. 3 Credits

UR-360 Environmental Systems and Public Policy
Prerequisites: UR-101
Examination of urban ecosystems, focusing on land uses designed to effectively utilize water, open space, and other natural resources.
Other or on demand. 3 Credits

UR-361 Public Policy and Environmental Issues
Prerequisites: UR-101
Investigation of the factors that determine the formation of public policy on the environment with consideration of the roles played by state and federal regulatory agencies.
Other or on demand. 3 Credits

UR-380 Public Policy and Cultural Diversity
LASC Categories: HBS, USW
Prerequisites: UR-101
This course will examine contemporary policy issues and problems deriving from cultural diversity. These will include areas such as immigration, population, demographics,affirmative action, public assistance, integration, separatism, political correct- ness, gender equality, and the role of organized religion in contempoary politics.
Fall and Spring and other or on demand. 3 Credits

UR-401 Research Seminar in Urban Studies/ Capstone
LASC Categories: CAP
Prerequisites: UR-101, UR-212 and UR-213 and have completed 75 credits
Research skills for urban-based projects including techniques in gathering, analyzing, and reporting data and various forms of field research.
Fall only and every year. 3 Credits

UR-408 Directed Study: Urban Studies
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
1-3 Credits

UR-410 Independent Study
Prerequisites: UR-101
Individual or small group directed research into selected problems and issues in urban affairs.
Fall and Spring and other or on demand. 3 Credits

UR-411 Assigned Reading in Urban Affairs
Prerequisites: UR-101
Directed readings for students interested in special topics related to their academic program of study.
Fall and Spring and every 2-3 years. 3 Credits

UR-421 Selected Topics in Urban Studies
Prerequisites: UR-101 Or permission of instructor
In-depth examination of topical issues challenging the intellectual and creative interests of advanced students in urban studies.
Fall and Spring and other or on demand. 3 Credits

UR-430 Seminar in Current Urban Problems
Prerequisites: UR-101
Individual and group investigation and research of selected and current urban problems.
Fall and Spring and other or on demand. 3 Credits

UR-432 Demographic Research Seminar
Prerequisites: UR-101
Small group or individual research using various sources in gathering, interpreting, reporting and projecting policy implications of demographic data.
Every year. 3 Credits

UR-440 Practicum in Urban Studies
Directed experiential study for advanced students.
Other or on demand and every year. 1-3 Credits

UR-450 Internship: Urban Studies
Supervised and intensive semester-long experience in community agencies, including weekly group seminar. (Requires completion of 21 credits in Urban Studies and consent of instructor.)
Fall and Spring and every year. 3-12 Credits

Four Plus One Bachelor of Science in Urban Studies / Master of Science in Non-Profit Management

Through a combined five year Bachelor of Science in Urban Studies/Masters in Non-Profit Management program of studies, it is possible for motivated full-time students who are urban studies majors and minors to complete a five-year program leading to degrees including both a bachelor's degree in urban studies and a Master's in Non-Profit Management. Urban Studies minors may qualify for the program as well.

Students who have completed 90 undergraduate credits may apply for admission into the special five-year BS/MS program if they have an overall GPA of not less than 3.0 and a major GPA of not less than 3.2.5. Students are also required to complete an undergraduate internship, independent study, or capstone project that incorporates work with a community-based organization as part of their undergraduate work. Students must meet all other requirements for admission to the Master in NonProfit Management. The GRE requirement is waived for students with an overall GPA of 3.25 or higher.

Please also consult the graduate catalog for more information.

In order to complete the joint degree, in the final year of their bachelor's work, students take three graduate level courses (9-11 credits) which are counted toward both the undergraduate and graduate degree requirements. These graduate credits are included in the undergraduate tuition of full-time state supported students. Students must also take at least one summer class between the Spring of their BS graduation and the Fall in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class allows students to complete course requirements for

the bachelor's and master's degree in five years (60 months). For more details, students should consult with the graduate coordinator of the program.

Intergenerational Studies and Community Service Minor

Requirements for a Minor in Intergenerational Studies and Community Service

Select 6 of the following:		18
UR-101	Introduction to Urban Studies	
UR-212	American Metropolitan Evolution	
UR-216	Woman and Aging in the Urban Enviroment	
UR-320	Human Needs and Social Policy	
UR-344	A Society for All Ages: Intergenerational Community Service	
UR-350	Urban Youth in American Society	
UR-351	Public Policy and Youth Services	
UR-440	Practicum in Urban Studies	
Total Credits		18

Urban Studies Major

Requirements for the Major

36 credits.

All Urban Studies majors are required to take the following courses:

UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Human Needs and Social Policy	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
Total Credits		15

Students are encouraged to take community-based experiential courses, including practicum and internship. These course credits may not exceed a total of 12, three of which may count towards the major. Students may take the internship after completing 18 credits in the major. The practicum can be taken at any time, upon permission of department.

Sample Timetable for Completion of Degree: Urban Studies

Course	Title	Credits
Year One		
Semester One		
EN-101	English Composition I	3
LASC	First-Year Seminar (p. 53)	3
UR-101	Introduction to Urban Studies	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (CON) (p. 49)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
UR	Any 100 or 200 level course in major	3
LASC	LASC Elective (NSP) (p. 59)	4
LASC	LASC Elective (TLC) (p. 63)	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	16
Year Two		
Semester Three		
UR	Major elective approved by advisor	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (CA) (p. 50)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Semester Four		
UR-213	Human Identity and Urban Environment	3
UR-212	American Metropolitan Evolution	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (GP) (p. 54)	3

SELECT	General Elective	3
	Credits	15

Year Three

Semester Five

UR-320	Human Needs and Social Policy	3
UR	Any 200 or 300 Level Course	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (TLC) (p. 63)	3
SELECT	General Elective	3
	Credits	15

Semester Six

LASC	LASC Elective (CA) (p. 50)	3
UR	Major elective approved by advisor	3
UR	Major elective approved by advisor	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Year Four

Semester Seven

UR-401	Research Seminar in Urban Studies/ Capstone	3
UR	Course recommended by Advisor	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15

Semester Eight

UR-450	Internship: Urban Studies	3-12
UR	Taken if short of 36 credits	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15-20
	Total Credits	121-126

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Urban Studies Major, Concentration in Gerontology

Requirements for a Major in Urban Studies with a Concentration in Gerontology

Urban Studies Major Requirements		(15 credits)
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Human Needs and Social Policy	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
Concentration in Gerontology		(12 credits)
PS-322	Psychology of Aging	3
Select three of the following:		9
UR-212	American Metropolitan Evolution	
UR-216	Woman and Aging in the Urban Enviroment	
UR-352	Policy Planning for an Aging Society [1]	
Total Credits		27

[1] Offered as part of the Consortium Gerontology Studies Program.

Urban Studies Major, Concentration in Intergenerational and Community Service

Requirements for a Major in Urban Studies, Concentration in Intergenerational and Community Service

Urban Studies Major Requirements		(15 credits)
UR-101	Introduction to Urban Studies	3

UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Human Needs and Social Policy	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
Concentration in Intergenerational and Community Service		(12 credits)
Experiential Learning (internship or practicum)		3
Select three of the following:		9
UR-216	Woman and Aging in the Urban Enviroment	
UR-321	Social Work in the Urban Society	
UR-344	A Society for All Ages: Intergenerational Community Service	
UR-350	Urban Youth in American Society	
UR-351	Public Policy and Youth Services	
UR-352	Policy Planning for an Aging Society	
Total Credits		27

Urban Studies Major, Concentration in Public Administration and Planning

Requirements for a Major in Urban Studies, Concentration in Public Administration and Planning

Urban Studies Major Requirements		(15 credits)
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Human Needs and Social Policy	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
Concentration in Public Administration and Planning		(12 credits)
Experiential Learning (internship or practicum)		3
Select three of the following:		9
UR-201	Analysis of Urban Systems	
UR-310	Power, Politics and Decision-Making in Urban Communities	
UR-311	Urban Politics and Policies	
UR-340	Urban Housing Dilemma	
UR-360	Environmental Systems and Public Policy	
UR-361	Public Policy and Environmental Issues	
UR-380	Public Policy and Cultural Diversity	
UR-430	Seminar in Current Urban Problems	
Total Credits		27

Urban Studies Major, Concentration in Social Work and Social Policy

Requirements for a Major in Urban Studies, Concentration in Social Work and Social Policy

Urban Studies Major Requirements		(15 credits)
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Human Needs and Social Policy	3
UR-401	Research Seminar in Urban Studies/ Capstone	3
Concentration in Social Work and Social Policy		(12 credits)
Experiential Learning (internship or practicum)		3
Select three of the following:		9
UR-305	Group Conflict in the Urban Community	
UR-306	Interviewing and Counseling Techniques	
UR-321	Social Work in the Urban Society	

UR-350	Urban Youth in American Society	
UR-351	Public Policy and Youth Services	
UR-380	Public Policy and Cultural Diversity	
Total Credits		27

Urban Studies Minor

Requirements for a Minor

18 credits including the following:

UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
Three additional UR 300-level courses		9
Total Credits		18

Visual and Performing Arts

Department of Visual and Performing Arts

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

- Art Minor (p. 253)
- Composition and Music Technology Minor (p. 267)
- Music Minor (p. 266)
- Theatre Minor (p. 267)
- Visual and Performing Arts and Education, Double Major (p. 264)
- Visual and Performing Arts Major (p. 263)

Michael C. Hachey, Professor (1993), B.F.A., M.F.A. Massachusetts College of Art

Stacey Parker, Associate Professor (2007), B.F.A. Alfred University; M.F.A. Rochester Institute of Technology

Amaryllis Siniossoglou, Professor (2005), PEP Royal College of Art, London; M.F. A. University of Massachusetts, Amherst; Ecole Nationale Superieure Des Beaux-Arts, Paris; Diplome Superieur d' Art Plastique; School of Art, Athens; Certificate, Drawing and Painting School

Catherine Wilcox-Titus, Professor (2004), B.A. University of Toronto; M.S. Simmons College; M.A., Ph.D. Boston University

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A. Eastman School of Music

Christie B. Nigro, Professor (1989), B.M. Syracuse University; M.M Yale University; Ph.D. University of Massachusetts

Robert Sahagian, Professor (1968), B.M. New England Conservatory of Music; M.M., Ph.D. Michigan State University

John H. Hood, Professor (2004), B.F.A. Arizona State University; M.F.A. University of Minnesota

Sam O'Connell, Associate Professor (2010), B.A., M.A. Washington University; Ph.D. Northwestern University

Adam Zahler, Department Chair, Professor (2007), B.A. University of Vermont; M.F. A. University of Virginia

Art Courses

AR-100 Cross Media Studio
LASC Categories: CA, TLC
An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.
Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation
This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.
Fall and Spring and every year. 3 Credits

AR-112 World Art Survey I
LASC Categories: CA, TLC, DAC
Surveys the world's major cultural achievements in the visual arts from the prehistoric period to ca. 1400.
Every year. 3 Credits

AR-113 World Art Survey II
LASC Categories: CA, TLC, DAC
Major cultural achievements in the visual arts from ca 1400 to the early twentieth century.
Every year. 3 Credits

AR-117 Visual Design: 2 Dimensions
LASC Categories: CA
A foundation for visual literacy through studio work utilizing such art elements as line, form, color, and texture.
Fall and Spring and every year. 3 Credits

AR-118 Global Art History
LASC Categories: GP, WAC, DAC
Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.
Every year. 3 Credits

AR-122 Visual Design: 3-DIMENSIONS
LASC Categories: CA
A foundation for visual literacy through studio work utilizing spatial elements such as plane, mass, volume, and structure.
Fall only and every year. 3 Credits

AR-123 Design Fundamentals
LASC Categories: CA, QAC
Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibbonaci series, fractals, regular solids.
Fall and Spring and every year. 3 Credits

AR-130 Painting I
LASC Categories: CA
An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression
Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals
LASC Categories: CA, GP, DAC
The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.
Fall and Spring and every year. 3 Credits

AR-150 Life Studio I
LASC Categories: CA
Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.
Fall and Spring and every year. 3 Credits

AR-160 Sculpture I
LASC Categories: CA, GP, WAC
Prerequisites: EN-102
Three-dimensional studio creations through a variety of traditional and contemporary materials. Both realistic and abstract concepts are explored.
Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms
LASC Categories: CA, GP, WAC, DAC
Prerequisites: EN-102
A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.
Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art
3 Credits

AR-193 First Year Seminar in Art
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

AR-200 History of American Art
LASC Categories: CA, TLC
A survey of the visual arts in the United States, from the Colonial Period to the present.
Spring only and other or on demand. 3 Credits

AR-210 Drawing and Painting Studio
LASC Categories: CA
This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.
Fall and Spring and every year. 3 Credits

AR-220 Foundations of Modern Art
LASC Categories: TLC, CA
Influential 19th Century developments, such as Romanticism, Realism, and Impressionism, are discussed in relationship with early 20th Century art.
Fall and Spring and every 2-3 years. 3 Credits

AR-225 Art Since Mid-20th Century
LASC Categories: CA, GP, WAC, DAC
Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.
Fall only and every year. 3 Credits

AR-230 Printmaking
LASC Categories: CA
Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.
Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio
LASC Categories: CA, GP
This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage and use historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.
Fall and Spring and every year. 3 Credits

AR-240 Watercolor
LASC Categories: CA, TLC
A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.
Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools
LASC Categories: CA
An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.
3 Credits

AR-270 Driftwood to Dumpsters
LASC Categories: CA, TLC, WAC
Prerequisites: EN-102
Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.
Every 2-3 years. 3 Credits

AR-275 Gallery and Museum Studies
LASC Categories: CA, TLC
All aspects of installation and exhibition of art work in WSU gallery, including solicitation of art, publicity, display, and management.
Every 2-3 years. 3 Credits

AR-285 History of Photography
LASC Categories: CA, TLC
The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]
Every 2-3 years. 3 Credits

AR-300 Painting II
Prerequisites: AR-130 or consent of instructor.
Continuation of painting with emphasis on individual development through interpretive projects.
Spring only and every 2-3 years. 3 Credits

AR-302 Drawing II
Prerequisites: AR-140 or consent of instructor
Advanced projects in drawing with increasing emphasis on individual direction.
Fall and Spring and every 2-3 years. 3 Credits

AR-306 Sculpture II
Prerequisites: AR-160 or consent of instructor.
Further exploration of sculptural form with a diversity of materials, techniques, and expressive meaning.
Spring only and every 2-3 years. 3 Credits

AR-330 Intermediate Printmaking
Prerequisites: AR-230
Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.
Every year. 3 Credits

AR-350 Special Topics in Art
Prerequisites: one studio course or consent of instructor.
A course covering topics which vary in response to specific student and faculty interest.
Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art
An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.
Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone
LASC Categories: CAP
Students research, design, and create their work for public presentation and evaluation by a faculty board of review. This is the final course in the Art Major and is a requirement for all the majors.
Spring only and every year. 3 Credits

Music Courses

MU-100 Music Fundamentals
LASC Categories: CA
An introduction to the rudiments of music theory, including pitch and rhythmic organization. Emphasis is placed on intervals, major and minor scales, reading and writing rhythm, and chord structures.
Fall and Spring and every 2-3 years. 3 Credits

MU-101 Fundamentals of Music and Aural Skills
LASC Categories: CA
An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.
Every year. 3 Credits

MU-102 Applied Music
Prerequisites: Audition required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and every year. 1 Credit

MU-104 Class Piano
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano technique and pedagogy in a group setting of 12 or fewer
Fall and Spring and every year. 1 Credit

MU-106 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation
LASC Categories: CA
General survey of masterpieces of major composers of various periods in history of music.
Fall and Spring and every year. 3 Credits

MU-120 Ear Training
Prerequisites: MU-100 or MU-101
An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfege.
Every year. 3 Credits

MU-125 Jazz Appreciation
LASC Categories: CA, TLC
Surveys the history of jazz beginning with the earliest roots in the American South to today.
Every year. 3 Credits

MU-140 World Music
LASC Categories: CA
An introducation to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.
Spring only and every 2-3 years. 3 Credits

MU-150 Opera
Analysis of the masterworks of the standard operatic repertoire.
Spring only and every year. 3 Credits

MU-175 Music in America
Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.
Other or on demand. 3 Credits

MU-185 Composition I
LASC Categories: CA
Prerequisites: MU-100 or MU-101
An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.
Spring only and every year. 3 Credits

MU-190 Piano Class
LASC Categories: CA
Prerequisites: MU-100 or MU-101
Basic piano proficiency. Class topics will include an introduction to the keyboard, hand position, and music theory. Solo literature appropriate to the level will be studied.
1 Credit

MU-193 Special Topics in Music:First Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

MU-195 Class Guitar
An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Every year. 1 Credit

MU-200 Issues in Music
This course deals with topics of special interest, in both seminars and studio environments at an introductory level.
3 Credits

MU-202 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I
LASC Categories: CA
Prerequisites: MU-100 or 101.
Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.
Spring only and other or on demand. 3 Credits

MU-208 Music Software
Prerequisites: MU-100 or MU-101
A survey of music software including Finale, Sibelius, Logic, GarageBand and other current applications. Students will explore the features of each program relative to notation, composition, arranging, and recording.
Every year. 3 Credits

MU-210 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Analysis and application of harmonization techniques using diatonic and chromatic chords. Emphasis is placed on voice-leading, non-chord tones, secondary chords, and modulation.
Other or on demand. 3 Credits

MU-213 Music Technology of MIDI Systems and Digital Audio
Prerequisites: MU-100 or knowledge of notation and department consent.
Offers study in MIDI/Digital Audio Systems and electronic music synthesis in a Macintosh environment. Prepares student interested in audio engineering.
Fall only and every year. 3 Credits

MU-215 Chorus and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.
Fall and Spring and every year. 3 Credits

MU-220 Chorus
LASC Categories: CA
Prerequisites: MU-215
Mixed Chorus repertoire. May be repeated.
Fall and Spring and every year. 1 Credit

MU-222 African Drumming
LASC Categories: GP, CA, DAC
An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.
Every year. 3 Credits

MU-225 Band
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in repertoire and performance. May be repeated.
Fall and Spring and every year. 0.5-1 Credits

MU-226 Band and Music Theory
LASC Categories: CA
Prerequisites: Audition Required
Study and experience in music notation and style of instrumental music. Participation in college band required.
Fall and Spring and other or on demand. 3 Credits

MU-228 Piano Ensemble
LASC Categories: CA
Prerequisites: MU-102 or MU-190
A small ensemble for keyboard players who will learn, explore, and perform four- hand piano repertoire.
Every year. 1 Credit

MU-231 Women in Music
LASC Categories: CA, TLC
A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.
3 Credits

MU-234 Music of the Baroque Period
The period of 1600-1750 with emphasis on Bach and Handel.
Fall and Spring and other or on demand. 3 Credits

MU-235 Music of the Classical Period
The period 1750-1827; Haydn, Mozart and Beethoven.
Fall and Spring and every year. 3 Credits

MU-237 Music in the Elementary School
LASC Categories: CA
Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.
Other or on demand. 3 Credits

MU-240 Music of the Romantic Period
An examination of Nineteenth Century music, beginning with Beethoven. [MU 140]
Fall and Spring and every 2-3 years. 3 Credits

MU-245 20th Century Music
A comprehensive study and general listener's approach to contemporary music beginning with Impressionism.
Spring only and every 2-3 years. 3 Credits

MU-250 Music of the Cinema:Spectacle, Splendor, And Spielberg
LASC Categories: CA, TLC
An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.
Spring only. 3 Credits

MU-255 The Golden Era of Piano Music
LASC Categories: CA
A survey of piano music beginning with Beethoven and continuing through the Romantic tradition to the early twentieth century.
Every 2-3 years. 3 Credits

MU-260 Symphonic Music
LASC Categories: CA
A survey of symphonic music beginning with the Classical Period.
Spring only and every 2-3 years. 3 Credits

MU-265 The Concerto
LASC Categories: CA
The concerto from the eighteenth to the twentieth century with emphasis on the development of the piano concerto.
Spring only and every 2-3 years. 3 Credits

MU-270 Music in Horror Films
A survey of scores composed for horror films. Emphasis is placed on the role of music in the genre and the composer's interpretation of various components of screenplays, including narrative, characters, and emotional content.
Every 2-3 years. 3 Credits

MU-275 Computers and Music
Prerequisites: MU-205
An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance, Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.
Other or on demand and other or on demand. 3 Credits

MU-280 History of Music
A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.
Fall and Spring and every year. 3 Credits

MU-281 Music History I
LASC Categories: CA
A general historical survey of Western art music from the Medieval, Renaissance, and Baroque Periods.
Every year. 3 Credits

MU-282 Music History II
LASC Categories: CA
A general survey of Western art music from the Classical and Romantic Periods, and the Twentieth Century.
Every year. 3 Credits

MU-285 Composition II
Prerequisites: MU-185 or MU-204, and MU-205.
A continuation of Composition I. Students will explore methods of tonal composition Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.
Fall and Spring and every year. 1 Credit

MU-300 Chorale
LASC Categories: CA
Prerequisites: Audition Required
Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated.
Every year. 1 Credit

MU-302 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall only and every year. 1 Credit

MU-305 Music Theory II
LASC Categories: CA
Prerequisites: MU-205
Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.
Fall only and every year. 3 Credits

MU-310 The American Musical in Performance
Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.
Every 2-3 years. 3 Credits

MU-321 Small Ensemble
LASC Categories: CA
The performance of musical works by a small ensemble. By permission of instructor or audition.
Fall and Spring and every year. 0.5-1 Credits

MU-375 Sound Synthesis
Prerequisites: MU-275
A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-380 Form and Analysis
Prerequisites: MU-210
An introduction to and analysis of the formal structures of music.
Fall and Spring and every year. 3 Credits

MU-385 Composition III
Prerequisites: MU-285 and MU-305.
An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter, This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.
Fall and Spring and every year. 1 Credit

MU-400 Independent Study in Music
Prerequisites: Consent of Instructor
An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music
Prerequisites: Audition Required
Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.
Student fee required. May be repeated. Offered every semester.
Fall and Spring. 1 Credit

MU-408 Directed Study: Music
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

MU-410 Special Topics in Music
This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio enviorments.
3 Credits

MU-485 Composition IV
Prerequisites: MU-385
Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.
Other or on demand. 1 Credit

Theatre Courses

TH-145 Acting I
LASC Categories: CA
Introductory acting theory and practice. Students present brief monologues and scenes in class.
Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre
LASC Categories: CA
An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.
Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students
LASC Categories: FYS
Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

TH-226 Script Analysis
LASC Categories: CA, TLC, DAC
Script analysis for theatre artists. How to take a script from initial reading to production.
Every 2-3 years. 3 Credits

TH-236 History of Theatre I
LASC Categories: CA, TLC
Survey of world theatre from Golden Age of Athens to Restoration England including brief overview of Asian theatre.
Fall and Spring and every 2-3 years. 3 Credits

TH-237 History of Theatre II
LASC Categories: TLC, GP, DAC
Survey of western theatre from Eighteenth to Twentieth Century, with reference to roots and development in other world cultures.
Fall and Spring and every 2-3 years. 3 Credits

TH-246 Voice and Movement
Prerequisites: TH-191 and TH-245
Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.
Every year. 3 Credits

TH-270 History of American Entertainment I
LASC Categories: CA, USW
An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.
Every year. 3 Credits

TH-271 History of American Entertainment II
LASC Categories: CA, USW
An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.
Every year. 3 Credits

TH-272 History of Costume
LASC Categories: CA
The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.
Every 2-3 years. 3 Credits

TH-275 Introduction to Stagecraft and Design
LASC Categories: CA
Basic theories of scenic, costume, and design with practicum.
Other or on demand. 3 Credits

TH-290 Theatre for Young Audiences
LASC Categories: ICW, CA, DAC
Organization of children's theatre, script selesction, visual design, rehearsal and performance.
Investigation of creative drama as a teaching tool in elementary education.
Spring only and other or on demand. 3 Credits

TH-292 Creative Dramatics
LASC Categories: CA, ICW
Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.
Every year. 3 Credits

TH-321 Rehearsal and Performance
LASC Categories: CA
Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.
Spring only and every year. 3 Credits

TH-345 Acting II
Prerequisites: TH-191 TH-245
Further development of acting skills with emphasis on stage-acting technique.
Every year. 3 Credits

TH-348 Stage Combat
LASC Categories: CA, ICW
Prerequisites: TH-191
Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.
Every year. 3 Credits

TH-355 Theatre Practicum
Practical work on Theatre production in various areas including acting, design, stage management, construction, etc.
Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre
LASC Categories: CA
Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.
Every year. 3 Credits

TH-370 Costume Design for Theatre
LASC Categories: CA
Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.
Every year. 3 Credits

TH-380 Directing
Prerequisites: TH-245 and TH-191
Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.
Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre
LASC Categories: CA
Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.
Every year. 3 Credits

TH-399 Special Topics in Theatre
Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).
Other or on demand and other or on demand. 3 Credits

TH-408 Directed Study: Theatre
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Visual and Performing Arts Courses

VP-155 First Year Practicum
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.
Spring only and every year. 1 Credit

VP-191 Special Topics
Introductory course to cover various topics
3 Credits

VP-193 Special Topics in Visual and Performing Arts: First-Year Students
LASC Categories: FYS
Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.
Every year. 3 Credits

VP-200 Critical Thinking in the Arts
LASC Categories: CA, TLC, DAC, QAC
The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.
Every year. 3 Credits

VP-210 Contemporary Dance Styles I
LASC Categories: CA
The study and movement of dance vocabularies in one or more contemporary and modern styles.
Every year. 3 Credits

VP-255 Second Year Practicum
Prerequisites: VP-155
Students will put into practice interdisciplinary concepts, ideas, and techniques at a exploratory level.
Spring only and every year. 1 Credit

VP-300 Interdisciplinary Arts Seminar
Prerequisites: VP-200
Examines examples of contemporary modes of collaborative, interdisciplinary, and cross-disciplinary works of music, theatre, and visual art.
Fall only and every year. 3 Credits

VP-310 Contemporary Dance Styles II
LASC Categories: CA
Prerequisites: VP-210
The study and movement of contemporary dance vocabularies at the intermediate to advanced level.
Every year. 3 Credits

VP-355 Third Year Practicum
Prerequisites: VP-155 and VP-255
Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.
Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory
Prerequisites: VP-200
An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.
Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice
Prerequisites: VP-364
Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.
Spring only and every year. 3 Credits

VP-375 Special Topics
A course that varies according to specific student and faculty interest.
Other or on demand. 3 Credits

VP-400 Arts Capstone/Senior Thesis
LASC Categories: CAP, WAC
Prerequisites: VP-200 VP-300 EN-102
Students research, design, and create works of art, music, and theatre for public presentation and evaluation by a faculty board of review.
Every year. 3 Credits

VP-405 Independent Study in the Arts
Prerequisites: Permission of Instructor
An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.
Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

VP-410 Special Topics in the Arts
Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]
Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts
Advanced students gain practical experience in a working arts environment.
Fall and Spring and every year. 3-12 Credits

Visual and Performing Arts Major

Aligning itself with the evolving needs of the current arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the regular art, music, and theatre coursework to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts while also gaining an in-depth knowledge of their preferred art form. This interdisciplinary approach teaches students how to use one art form to inform the other.

Students who select a VPA Major also select a concentration in Art, Music or Theatre. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students must complete the foundation courses plus the course required for a concentration in Art, Music or Theatre.

Requirements for a VPA Major – Foundation Courses

Minimum requirement for the major is completion of a three course (9 credit) Foundation curriculum, a three course (9 credit) Interdisciplinary Core, and 27 credits in one of three concentrations. Students will declare a concentration in Art, Music, or Theatre.

Interdisciplinary Foundation Courses		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Total Credits		18

Visual and Performing Arts and Education, Double Major

Students who double major in Early Childhood or Elementary Education may concentrate in Art, Music, Theatre, or Visual and Performing Arts. They will fulfill the Interdisciplinary Foundation and Core requirements plus requirements in their concentration for a total of 36 credits.

Requirements for an Emphasis in Art for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		

VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Art for Students who double major in Early Childhood or Elementary Education		(18 credits)
Art History		
Select one of the following:		3
AR-112	World Art Survey I	
AR-113	World Art Survey II	
AR-225	Art Since Mid-20th Century	
Studio Art		
AR-117	Visual Design: 2 Dimensions	3
AR-122	Visual Design: 3-DIMENSIONS	3
AR-140	Drawing Fundamentals	3
Art Pedagogy		
AR-260	Visual Arts in the Schools	3
Electives		
Art electives		3
Total Credits		36

Requirements for an Emphasis in Music for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Music for Students who double major in Early Childhood or Elementary Education		(18 credits)
Music Theory		
MU-101	Fundamentals of Music and Aural Skills (Unless taken as foundation)	3
or MU-205	Music Theory I	
Music Literature		
Select one of the following:		3
MU-115	Music Appreciation (Unless taken as foundation)	
MU-281	Music History I	
MU-282	Music History II	
Applied Music (Lessons and Ensembles)		
Select one of the following:		2
MU-102	Applied Music (1 credit each)	
MU-104	Class Piano	
Participation in two Ensembles at .5 credits each		1
Music Pedagogy		
MU-237	Music in the Elementary School	3
Electives in Music		
Electives		6
Total Credits		36

Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3

Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
Theatre Pedagogy		
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Performance and Production		
TH-145	Acting I	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Electives in Theatre		
Electives		3
Total Credits		36

Requirements for an Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education

Visual and Performing Arts Major		(18 credits)
Foundation in Art		
AR-113	World Art Survey II	3
or AR-100	Cross Media Studio	
Foundation in Music		
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-102	Applied Music	
MU-115	Music Appreciation	
Foundation in Theatre		
TH-191	Introduction to the Theatre	3
Interdisciplinary Core Courses		
VP-200	Critical Thinking in the Arts	3
VP-300	Interdisciplinary Arts Seminar	3
VP-400	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(18 credits)
AR-260	Visual Arts in the Schools	3
MU-237	Music in the Elementary School	3
TH-290	Theatre for Young Audiences	3
TH-292	Creative Dramatics	3
Electives in Art, Music, Theatre, and Visual and Performing Arts		
Electives		6
Total Credits		36

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art related courses, including a minimum of three credits in art history and at least one art course at the 300-level.

SELECT	AR Electives	12
SELECT	Art History Elective	3
SELECT	AR Elective 300+	3
Total Credits		18

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music minor, students complete courses in the performance, history, composition, and theory of music, and also in applied music. Students must audition for applied music spots. Students are

provided with opportunities to perform in ensembles as well as take a wide variety of classroom courses to enhance musical understanding and literacy.

Requirements for a Minor in Music

18 credits in music with 3 credits are required in each of the following:

Music Theory		(3 credits)
Select one of the following:		3
MU-100	Music Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-205	Music Theory I	
Music History		(0 credits)
SELECT	Music History (MU 115 Music Appreciation or historical period courses)	
Applied Studies		(3 credits)
private lessons or ensembles		3
Electives		(9 credits)
9 credits in music electives		9
Total Credits		15

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Students choose courses based on personal interest from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least ones stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

TH-145	Acting I	3
TH-191	Introduction to the Theatre	3
TH-275	Introduction to Stagecraft and Design	3
TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

World Languages

Department of World Languages

The department of World Languages offers courses in Spanish (major, minor), French (minor), German, and Arabic.

Students with interest in international business, international relations, careers in the health professions, nursing, global studies, ethnic studies, or criminal justice among others are strongly encouraged to take language courses.

Language courses also fulfill different LASC requirements, such as "Thought, Language, and Culture" (TLC), "Global Perspectives" (GP), "Diversity Across the Curriculum" (DAC), "Writing Across the Curriculum" (WAC); or "Creative Arts" (CA).

Café Babel

"Café Babel" is a weekly coffee-hour open to all speakers of a foreign language, whether students, faculty or staff. Guests can converse in a relaxed setting while enjoying a cup of coffee/tea/hot cocoa, dessert, and good company.

Coffee and desserts are free, provided by the Department of World Languages.

Café Babel is hold in SUL310 (Faculty Lounge)

- Arabic (p. 412)
- French (p. 412)
- Spanish (p. 414)

Arabic Faculty

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

French Faculty

Judith Jeon-Chapman, Professor (1993), B.A. College of St. Benedict; M.A., Ph.D. University of Washington

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

Spanish Faculty

Antonio Guijarro-Donadios, Assistant Professor (2014), B.A. Universidad Complutense de Madrid, Spain; M.A. Salford University, England; M.A., Ph.D., University of Connecticut

Judith Jeon-Chapman, Professor (1993), B.A. College of St. Benedict; M.A., Ph.D. University of Washington

Elizabeth Osborne, Assistant Professor (2016), B.A. The George Washington University; M.A. Universidad de Chile; Ph.D. Stony Brook University

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

Naida Saavedra, Assistant Professor (2016), B.A. Universidad de Zulia, Venezuela; M.A., Ph.D. Florida State University

World Languages Courses

WL-101 Beginning World Language
LASC Categories: GP
Beginnin level I instruction in world languages that are not otherwise offered by the Department of Languages and Literature.
Other or on demand. 3 Credits

WL-102 Beginning World Language II
LASC Categories: GP
Prerequisites: WL-101 or equivalent. Anyone with 2+ years of language exposure should enroll in this course or higher.
Beginning level II instruction in world languages that are not otherwise offered by the Department of Languages and Literature.
Other or on demand. 3 Credits

WL-191 Special Topics in World Language
An introductory level course in a world language covering linguistic issues, socio-historical or cultural aspects, or current or specialized topics. Course may be taught in English.
Every year. 3 Credits

WL-210 Intermediate World Language I
Prerequisites: WL-102
Intermediate level I instruction in world languages that are not otherwise offered by the Department of Languages and Literature.
Other or on demand. 3 Credits

WL-211 Intermediate World Language II
Prerequisites: WL-210
Intermediate level II instruction in world languages that are not otherwise offered by the Department of Languages and Literature.
Other or on demand. 3 Credits

WL-408 Directed Study: World Languages
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

Arabic

Courses in Arabic are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who study Arabic will develop listening, speaking, reading, and writing fluency at the beginning and intermediate levels. AB-101 and AB-102 also form part of the requirements for the Minor in Middle East Studies offered by the Department of History and Political Science.

Faculty

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

AB-101 Beginning Arabic I
LASC Categories: TLC
Introduction to the Arabic language and cultures of the Arabic-speaking world.
3 Credits

AB-102 Beginning Arabic II
LASC Categories: TLC
Prerequisites: AB-101
A continuation of AB 101, designed for students to acquire additional vocabulary, grammar, and reading ability.
3 Credits

AB-210 Intermediate Arabic I
LASC Categories: TLC
Prerequisites: AB-102
Instruction in advanced rules of Arabic grammar and verb system, and in advanced writing and reading.
3 Credits

AB-211 Intermediate Arabic II
LASC Categories: TLC
Prerequisites: AB-210
Reading and discussion of texts dealing with literature, arts, geography, history, and culture of Arabic-speaking world.
3 Credits

French

Department of World Languages

Courses in French are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who minor in French will develop listening, speaking, reading, and writing fluency and will study the culture, history and literature of the people who use the language.

Alpha Mu Gamma, a national honor society in foreign languages, recognizes excellence in the study of foreign languages. Any Worcester State University student who receives two "A's" in French at any level at Worcester State University and a 3.0 cumulative G.P.A. is eligible to join. Application for membership is in early February. Contact Professor Judith Jeon-Chapman.

Placement for French Courses

Students are encouraged to discuss placement with French Faculty or the World Languages Department Chair. The following are intended to be general placement guidelines to help students with previous experience with French:

0-2 years of French in high school:	FR-101
1-2 years of French in high school:	FR-102
3 years of French in high school:	FR-210
4 years of French in high school:	FR-211
5 or more years of French in high school:	300-level & 400-level courses
Native Speakers of French:	300-level & 400-level courses

Students may also take a placement exam in French at the Academic Success Center. It is recommended that the results of the test be discussed with the

French Faculty or the World Languages Department Chair, especially if the test places the student below the level recommended above.

Café Babel

"Café Babel" is a weekly coffee-hour open to all speakers of a foreign language, whether students, faculty or staff. Guests can converse in a relaxed setting while enjoying a cup of coffee/tea/hot cocoa, dessert, and good company.

Coffee and desserts are free, provided by the Department of World Languages.

Café Babel is hold in SUL310 (Faculty Lounge)

- French Minor (p. 414)

Faculty

Judith Jeon-Chapman, Professor (1993), B.A. College of St. Benedict; M.A., Ph.D. University of Washington

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

FR-101 Beginning French I
LASC Categories: TLC, GP
Fundamentals of pronunciation, patterns of speech, basic structures. Develops listening, speaking, reading, and writing skills.
Fall only and other or on demand. 3 Credits

FR-102 Beginning French II
LASC Categories: TLC, GP
Continuation of FR101.
Spring only and other or on demand. 3 Credits

FR-191 Special Topics in French
An introductory level course in French on current or specialized topics.
Every year. 3 Credits

FR-193 Special Topics in French for First Year Students
LASC Categories: FYS
An introductory level course covering topics of special interest to first year students.
Every year. 3 Credits

FR-210 Intermediate French I
LASC Categories: TLC, GP
Prerequisites: FR-102
Review of fundamentals and presentation of more complex grammatical features; development of conversational skills; selected readings; written and oral composition.
Every year. 3 Credits

FR-211 Intermediate French II
LASC Categories: TLC, GP
Prerequisites: FR-210
Continuation of FR210.
Spring only and every year. 3 Credits

FR-321 Advanced French Composition I
LASC Categories: TLC, WAC
Prerequisites: EN-102 or EN-250 or EN-202
Practice in diverse composition styles as well as review of grammar, and introduction to reading French texts. Conducted in French. [Prerequisite: Two 200-level French courses.]
Other or on demand. 3 Credits

FR-323 Advanced French Conversation
LASC Categories: TLC
Prerequisites: FR-211 or any 300 level French course.
Development of fluency and accuracy, free discussions, prepared oral presentations, practical exercises in oral expression. Conducted in French.
Spring only and other or on demand. 3 Credits

FR-331 General French Civilization
LASC Categories: TLC
Prerequisites: 6 credits department FR At level 200;
Significant aspects of French history, geography, cultural achievements to world War I. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]
Other or on demand. 3 Credits

FR-341 Introduction to French Literature
LASC Categories: TLC, GP, DAC
Prerequisites: 6 credits department FR At level 200;
Major periods and genres of French literature; for majors and minors. Conducted in French. [Prerequisites: Two FR 200 level courses or equivalent.]
Other or on demand. 3 Credits

FR-342 Survey of French Literature I
LASC Categories: TLC
Prerequisites: 6 credits department FR At level 200; Selections from the epic, drama, lyric poetry, and the major prose writers to major authors of the classical period. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]
Every 2-3 years. 3 Credits

FR-344 Survey of French Literature II
LASC Categories: TLC
Prerequisites: 6 credits department FR At level 200; Major authors of the eighteenth and nineteenth centuries. Conducted in French. [Prerequisites: Two FR 200 level courses.]
Every 2-3 years. 3 Credits

FR-346 Twentieth Century French Literature
LASC Categories: TLC, GP
Prerequisites: 6 credits department FR At level 200; Major novelists, dramatists and poets from the turn of the century to the present. Conducted in French. [Two FR 200 level courses or equivalent.]
Other or on demand. 3 Credits

FR-401 Seminar in French Studies
Special topics in French language, literature or civilization. For advanced students.
Other or on demand. 3 Credits

FR-402 Independent Study in French
Study of a special topic. Both content and eligibility subject to departmental guidelines and approval. Consent of instructor.
Fall and Spring and every year. 1-6 Credits

FR-403 Teaching Assistantship French
Teaching Assistants in French will regularly attend the beginning or intermediate-level classes to which they are assigned to assist the professor. Suggested for advanced students of French.
Fall only and every year. 3 Credits

FR-408 Directed Study: French
3 Credits

French Minor

Requirements for a Minor in French

18 credits in French including:

Select four beginner and intermediate courses	
FR-100-FR-299	12
Select two advanced courses	
FR-300-FR-499	6
Total Credits	18

(Students with advanced knowledge of French should begin at 300-level)

Spanish

Department of World Languages

Courses in Spanish are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who major or minor in a language will develop listening, speaking, reading, and writing fluency and will study the culture, history and literature of the people who use the language.

Students with previous knowledge of or background in Spanish are encouraged to take the CLEP exam at Academic Success, in order to receive credit for SP101, SP102, SP210, and SP211 (up to 12 institutional credits).

Alpha Mu Gamma, a national honor society in foreign languages, recognizes excellence in the study of foreign languages. Any Worcester State University student who receives two "A's" in Spanish, or two "A's" in French, at any level and who has a 3.0 cumulative GPA is eligible to join. Application for membership is in early February. Contact Professor Judith Jeon-Chapman.

Spanish Clinic

The Spanish Clinic is a free tutoring service where Spanish students of any level can practice their language skills. Advanced Spanish majors work as tutors to help their peers with grammar reviews, homework, conversational practice, feedback on class presentations, etc.

The Spanish Clinic is located in SUL 302-B. Open daily, from early morning to mid-afternoon. No appointment needed.

For more information, please contact Dr. Elizabeth Osborne: eosborne1@worcester.edu

Spanish Club

The Spanish Club is a student organization at WSU open to Spanish students, Spanish speakers, or anyone interested in the language and cultures of the Hispanic world. The Spanish Club holds activities on a regular basis, such as movie nights, cooking lessons, dancing events, board-game evenings, open mics, etc.

Café Babel

"Café Babel" is a weekly coffee-hour open to all speakers of a "foreign" language, whether students, faculty or staff. Guests can converse in a relaxed setting while enjoying a cup of coffee/tea/hot cocoa, dessert, and good company.

Coffee and desserts are free, provided by the Department of World Languages.

Café Babel is hold in SUL310 (Faculty Lounge)

- Spanish Major (p. 418)
- Spanish Major, Concentration in Spanish for the Professions (p. 419)
- Spanish Major, Concentration in Spanish/ Education (p. 421)
- Spanish Minor for Health Professionals (p. 422)

Faculty

Antonio Guijarro-Donadios, Assistant Professor (2014), B.A. Universidad Complutense de Madrid, Spain; M.A. Salford University, England; M.A., Ph.D., University of Connecticut

Judith Jeon-Chapman, Professor (1993), B.A. College of St. Benedict; M.A., Ph.D. University of Washington

Elizabeth Osborne, Assistant Professor (2016), B.A. The George Washington University; M.A. Universidad de Chile; Ph.D. Stony Brook University

Ana Perez-Manrique, Department Chair, Associate Professor (2006), B.A. Universidad de Malaga, Spain; M.A. University of South Carolina; Ph.D. Florida State University

Naida Saavedra, Assistant Professor (2016), B.A. Universidad de Zulia, Venezuela; M.A., Ph.D. Florida State University

SP-101 Beginning Spanish I
LASC Categories: TLC
Basic oral and written proficiency for daily communication; may be taken as a self-contained unit or as a basis for further development. Audio-visual method.
Every year. 3 Credits

SP-102 Beginning Spanish II
LASC Categories: TLC
Prerequisites: SP-101 or appropriate placement score.
Continuation of SP101.
Every year. 3 Credits

SP-191 Special Topics in Spanish
LASC Categories: TLC, DAC, GP
An introductory level course in Spanish on current or specialized topics.
Every year. 3 Credits

SP-193 First Year Seminar Spanish
LASC Categories: FYS
Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

SP-210 Intermediate Spanish I
LASC Categories: TLC
Prerequisites: SP-102 or appropriate placement score.
Conversational patterns, idioms, dialogues, and special vocabularies for daily life situations. [Formerly SP 212]
Every year. 3 Credits

SP-211 Intermediate Spanish II
LASC Categories: TLC
Prerequisites: SP-210 or appropriate placement score.
Continuation of SP210. [Formerly SP213.]
Every year. 3 Credits

SP-291 Introduction to Medical Spanish
LASC Categories: ICW, TLC
Prerequisites: SP-211 or above or have 3 years of language instruction.
Students will learn basic phrases in Spanish as related to their daily activities in various health fields. This course focuses on language used in health professions as well as cultural situations, which doctors, technicians, nurses, and EMTs may experience. By familiarizing students with conversational and medical Spanish, it will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Designed for students to gain beginning-level competence in Medical Spanish that will enable them to communicate more effectively with Spanish-speaking patients and their families.
Every 2-3 years. 3 Credits

SP-292 Spanish for Women's Health
LASC Categories: GP, ICW, DAC
Prerequisites: SP-211 or above, or 3 years of language instruction.
In this course, students will develop communication skills in Spanish using information and vocabulary related to women's health. The content of this course focuses on language used in health professions as well as cultural situations. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Finally, the course's focus on cultural competency interrogates intersections between women's health and topics including but not limited to politics, economics, gender, sexuality, race and age.
Every 2-3 years. 3 Credits

SP-293 Health and the Latino Community
LASC Categories: HBS, TLC
Prerequisites: SP-211 or above or have 3 years of language instruction.
Students will explore the ways in which language and culture shape the approach to health and healthcare experiences of Latinos in the US, and the factors that contribute to health disparities among this group (social, cultural, economic, environmental, and biological). Students will examine how health outcomes and risk factors are arrayed across different generations. Language barriers and sociolinguistic issues will also be studied. Students will identify and discuss causes of health inequities, survey major Latino health issues, and analyze the current and future context of Latino health and healthcare in the U.S.
Every 2-3 years. 3 Credits

SP-321 Advanced Spanish Composition I
LASC Categories: TLC, WAC
Prerequisites: SP-321 or appropriate placement score.
Facility in prose writing; study of style of selected authors; variety of expression through word discrimination, and advanced grammatical structures. [Prerequisites: Two SP 200 level courses.]
Every year. 3 Credits

SP-322 Advanced Spanish Composition II
LASC Categories: TLC, WAC
Prerequisites: SP-321
Continuation of SP321.
Every year. 3 Credits

SP-323 Spanish Conversation I
LASC Categories: TLC
Prerequisites: two SP 200 level courses
Intensive conversational practice for improving intonation, pronunciation, fluency, review of language usage. This course is for non-native Spanish speakers only. [Prerequisites: Two SP 200 level courses.]
Every year. 3 Credits

SP-324 Spanish Conversation II
LASC Categories: TLC
Prerequisites: two 200-level SP courses.
Continuation of SP323.
Every year. 3 Credits

SP-326 Spanish for the Professions
LASC Categories: GP, TLC
Prerequisites: SP-321.
Intensive practice with language and documents used in private and public sectors including business, medicine, communication, education and social services.
Every year. 3 Credits

SP-327 Projects and Issues in Spanish for the Professions
Prerequisites: SP-321.
Close study of selected projects and bicultural issues for Spanish professionals.
Spring only and every year. 3 Credits

SP-331 Spanish Civilization
LASC Categories: CA
Prerequisites: two SP 200 level courses
An historical survey of Spanish social, cultural, and political life. Conducted in Spranish. [Prerequisites: Two SP 200 level courses.]
Spring only and every year. 3 Credits

SP-332 The Hispanic World Today
LASC Categories: DAC, GP
Prerequisites: two SP 200 level courses
Social, economic and political institutions; value systems and customs. Conducted in Spanish. [Prerequisites: Two SP 200 level courses.]
Fall only and every year. 3 Credits

SP-333 Hispanic Presence in US
Prerequisites: two SP 200 level courses
Socio-cultural study of Hispanics in the United States, with a focus on major contemporary issues. Conducted un Spanish. [Prerequisites: Two SP 200 level courses.]
Fall only and every year. 3 Credits

SP-341 Readings in Spanish Literature
Prerequisites: SP-321, SP-323 and SP-324
Selected masterpieces from Middle Ages to present; social, cultural, and stylistic features of different periods. Recommended as a first course in Spanish literature.
Other or on demand. 3 Credits

SP-343 Poetry/Theatre Spa Golden Age Poetry and Theatre of Spain's Golden Age
Prerequisites: SP-321 SP-323 SP-324
Study of the poetry and drama created during the Renaissance and Baroque periods, known as the Golden Age of Spanish letters.
Fall and Spring and every year. 3 Credits

SP-348 Contemporary Spanish Literature
Prerequisites: SP-321
Literary works from the generation of 1898 to the present.
Fall and Spring and other or on demand. 3 Credits

SP-349 Spanish-American Literature
Prerequisites: SP-321, and SP-323 or SP-324.
Representative works from South and Central American authors from the colonial period to the present.
Other or on demand. 3 Credits

SP-355 Effective Teaching of a Foreign Language
Prerequisites: SP-321, SP-323, SP-324, ED-251, ED-270 and ED-351 or ED-352
Examines and evaluates effective teaching techniques and strategies as well as second-language acquisition theory for middle/secondary foreign language classrooms.
Fall and Spring. 3 Credits

SP-390 Spanish for Native Speakers
This course will explore contemporary issues as a basis for further development of the Spanish language skills of native speakers.
Fall and Spring and every year. 3 Credits

SP-401 Advanced Study: Special Topics
Special topics in language, literature, civilization or field work of mutual interest to student and instructor. For advanced students.
Other or on demand. 3 Credits

SP-402 Independent Study: Spanish
Study of a special topic. Both content and eligibility are subject to departmental guidelines and approval.
Every year. 1-6 Credits

SP-403 Teachng Assistantship in Spanish
Teaching Assistants in Spanish will regularly attend the beginning or intermediate-level Language classes to which they are assigned to assist the professor.
Fall only and every year. 3 Credits

SP-408 Directed Study: Spanish
Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
Fall and Spring. 3 Credits

SP-475 Internship: Spanish
LASC Categories: CAP
Prerequisites: SP-321 and SP-322 and SP-326
Prerequisites or Corequisite: SP-327
Provides majors practical experience in areas where their speaking, reading, and writing skills may be applied.
Every year. 3 Credits

Note: Courses in other foreign languages such as German, Chinese, French and Arabic, are offered when demand warrants and staffing permits.

Spanish Major

The Major in Spanish: The major in Spanish is designed to offer students the opportunity to consolidate their study of the language with a related field of study. Students who major in Spanish can choose to concentrate on:

1. the Standard Spanish Major,
2. K-12 Teaching Certification in Spanish or
3. Spanish for the Professions.

All of these programs have been configured to maximize the potential of the student in today's professional climate as well as to prepare the student for admittance into graduate programs at other institutions. Students who major in Spanish will develop fluency in listening, speaking, reading and writing skills and will study the culture, history and literature of Spain and the Americas.

Students are strongly encouraged to take a Placement Exam in Spanish at the Academic Success Center. The placement exam is a cost-free, short exam that will allow students with previous exposure to the language to register for courses above SP-101. Study-Abroad opportunities are available for language study in several Spanish-speaking countries.

Students with previous knowledge of or background in the language are also encouraged to take the CLEP Exam at Academic Success, in order to receive credit for SP-101, SP-102, SP-210 and SP-211 (up to 12 institutional credits).

Requirements for a Major in Spanish

36 credits including:

SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II [1,2]	6
SP-321	Advanced Spanish Composition I [3]	3
SP-322	Advanced Spanish Composition II	3
SP-323	Spanish Conversation I [4]	3
SP-326	Spanish for the Professions	3
SP-331	Spanish Civilization	3
SP-332	The Hispanic World Today	3
or SP-333	Hispanic Presence in US	
Spanish Literature courses [5]		6
Spanish Electives in Advanced Language, Civilization or Literature		6
Total Credits		36

1 6 credits maximum: These courses may be waived by oral and/or written examination
2 Students with advanced knowledge of Spanish should begin at 300-level.
3 Required of all students unless exempted by the Department of World Languages.
4 This course is a required course for all non-native Spanish speakers.
5 6 credits minimum

Students must demonstrate competency in a second foreign language at the **elementary** level. ("Elementary level" means 101 and 102 - two semesters of the same language.)

Sample Timetable for Completion of Degree: Spanish

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
SP-210	Intermediate Spanish I	3
LASC	LASC Elective (NSP) (p. 59)	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15

Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
SP-211	Intermediate Spanish II	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Year Two		
Semester Three		
SP-321	Advanced Spanish Composition I	3
SP-323	Spanish Conversation I	3
WL/LASC	Other Language 101 course (TLC)	3
LASC	LASC Elective (NSP) (p. 59)	4
SELECT	General Elective	3
	Credits	16
Semester Four		
SP-322	Advanced Spanish Composition II	3
SP-331	Spanish Civilization	3
WL	Other Language 102 course	3
LASC	LASC Elective (HBS) (p. 56)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	15
Year Three		
Semester Five		
SP-326	Spanish for the Professions	3
SP-332 or SP-333	The Hispanic World Today or Hispanic Presence in US	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Six		
SP-3XX+	SP Major Elective	3
SP-3XX+	SP Major Literature Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
SP-3XX+	SP Major Literature Elective	3
LASP/SP	Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
SP	300/400 Literature Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
	Total Credits	121

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Spanish Major, Concentration in Spanish for the Professions

36 credits

This concentration must be completed in conjunction with a minor or major in another field. The concentration in Spanish for the Professions is recommended for students with a second major or minor for whom a college-level command of the language significantly enhances opportunities for graduate school and/or employment. This course of study must be approved by the department.

Requirements for a Major in Spanish, Concentration in Spanish for the Professions

SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II [1]	6
SP-321	Advanced Spanish Composition I [2]	3
SP-322	Advanced Spanish Composition II	3
SP-323	Spanish Conversation I [3]	3

SP-326	Spanish for the Professions	3
SP-327	Projects and Issues in Spanish for the Professions	3
SP-331	Spanish Civilization	3
SP-332	The Hispanic World Today	3
or SP-333	Hispanic Presence in US	
Spanish Literature courses (3 credits minimum)		3
Internship in Spanish (3 credits minimum)		3
Spanish Electives in Advanced Language, Civilization, Literature, Internship or Special Topics in Spanish for the Professions		3
Total Credits		36

[1] 6 credits maximum: These courses may be waived by oral and/or written examination.

[2] Required of all students unless exempted by the Department of World Languages.

[3] This course is a required course for all non-native Spanish speakers.

There is no second foreign language requirement for this concentration.

Sample Timetable for Completion of Degree: Spanish for the Professions

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
SP-210	Intermediate Spanish I	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (GP) (p. 54)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
SP-211	Intermediate Spanish II	3
LASC	LASC Elective (USW) (p. 61)	3
LASC	LASC Elective (NSP) (p. 59)	3
	Credits	15
Year Two		
Semester Three		
SP-321	Advanced Spanish Composition I	3
SP-323	Spanish Conversation I	3
LASC	LASC Elective (NSP) (p. 59)	4
SELECT	General Elective	3
LASC	LASC Elective (TLC) (p. 63)	3
	Credits	16
Semester Four		
SP-322	Advanced Spanish Composition II	3
LASC	LASC Elective (CA) (p. 50)	3
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 56)	3
SELECT	General Elective	3
	Credits	15
Year Three		
Semester Five		
SP-326	Spanish for the Professions	3
SP-332 or SP-333	The Hispanic World Today or Hispanic Presence in US	3
SELECT	General Elective	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 58)	3
	Credits	15
Semester Six		
SP-327	Projects and Issues in Spanish for the Professions	3
SP-331	Spanish Civilization	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Year Four		
Semester Seven		
SP-3XX+	SP Major Elective	3
LASC	Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	15
Semester Eight		
SP-475	Internship: Spanish	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

SELECT	General Elective	3
	Credits	15
	Total Credits	121

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Spanish Major, Concentration in Spanish/Education

Requirements for a Major in Spanish with Concentration in Spanish/Education

36 credits including:

SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II [1,2]	6
SP-321	Advanced Spanish Composition I [3]	3
SP-322	Advanced Spanish Composition II	3
SP-323	Spanish Conversation I [4]	3
SP-326	Spanish for the Professions	3
SP-331	Spanish Civilization	3
SP-332	The Hispanic World Today	3
or SP-333	Hispanic Presence in US	
SP-355	Effective Teaching of a Foreign Language	3
Spanish Literature courses [5]		9
Total Credits		36

1. 6 credits maximum: These courses may be waived by oral and/or written examination.
2. Students with advanced knowledge of Spanish should begin at 300-level.
3. Required of all students unless exempted by the Department of World Languages.
4. This course is a required course for all non-native Spanish speakers.
5. 9 credits minimum.

Students must also complete the requirements established by the Education Department. The course of study which leads to teaching certification is in Secondary Education.

Students must also demonstrate competency in a second foreign language at the intermediate level. ("Intermediate level" means completion of 4 semesters of the same language, 101, 102, 210 and 211).

Sample Timetable for Completion of Degree: Spanish, Secondary Education Minor

Course	Title	Credits
Year One		
Semester One		
LASC	First-Year Seminar (FYS) (p. 53)	3
EN-101	English Composition I	3
SP-210	Intermediate Spanish I	3
PS-101	General Psychology	3
WL/LASC	Other Language 101 course (TLC)	3
	Credits	15
Semester Two		
EN-102	English Composition II	3
LASC	LASC Elective (CON) (p. 49)	3
SP-211	Intermediate Spanish II	3
PS-312	Psychology of Adolescence	3
WL	Other Language 101 course	3
	Credits	15
Year Two		
Semester Three		
SP-321	Advanced Spanish Composition I	3
SP-323	Spanish Conversation I	3
ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
WL	Other Language 210 course	3
LASC	LASC Elective (NSP) (p. 59)	4
	Credits	16
Semester Four		
SP-322	Advanced Spanish Composition II	3
SP-331	Spanish Civilization	3
ED-250	Educational Psychology	3
WL	Other Language 211 course	3
LASC	LASC Elective (NSP) (p. 59)	3

LASC	LASC Elective (ICW) (p. 58)	3
	Credits	18
Year Three		
Semester Five		
SP-326	Spanish for the Professions	3
SP-332 or SP-333	The Hispanic World Today or Hispanic Presence in US	3
ED-251	Principles of Curriculum, Instruction And Assessment in Middle and High School	3
LASC	LASC Elective (GP) (p. 54)	3
LASC	LASC Elective (QR) (p. 61)	3
LASC	LASC Elective (CA) (p. 50)	3
	Credits	18
Semester Six		
SP	300/400 Literature Elective	3
SP	300/400 Literature Elective	3
ED-270	Diversity & Multicultural Ed	3
SELECT	General Elective	3
LASC	LASC Elective (USW) (p. 61)	3
	Credits	15
Year Four		
Semester Seven		
LASC/SP	300 or 400 Level Literature Elective/CAPSTONE	3
SP-355	Effective Teaching of a Foreign Language	3
ED-351	Exceptionalities and Accommodating Diverse Learners in Secondary Schools	3
ED-353	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School	3
ED-371	Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level. [1]	3
SELECT	General Elective	3
	Credits	18
Semester Eight		
ED-480	Practicum Tchg Secondary Sch	9
ED-424	Sem: Teaching Practicum	3
	Credits	12
	Total Credits	127

[1] Students must take and pass the MTEL in their subject matter to be admitted into Stage 3.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Spanish Minor for Health Professionals

Minor in Spanish for Health Professionals (18 credits)

The Minor in Spanish for Health Professionals will equip students with the terminology, linguistic tools, and cultural competence needed to communicate successfully and effectively in many health-related real-life situations and settings. To that end, the minor will focus on four main areas:

1) building the student's medical/ health vocabulary (related to topics such as the human body, at the doctor's office, diet and nutrition, medical emergencies, women's health, common illnesses and diseases, etc.),

2) developing and further practicing grammatical constructions (command forms and polite requests, numbers, question words, measurements and equivalencies with metric system, etc.),

3) increasing the student's self-confidence and effectiveness in oral communication

4) understanding the diversity within the Hispanic community, as well as its different customs, cultural practices, and approaches related to medical/ health matters.

Requirements for a Minor in Spanish

Students must demonstrate Spanish proficiency at the 200-level or above to enroll in Spanish Health courses. Completing SP210 and SP211 prior to registering for Spanish Health courses is highly recommended.

18 credits are required to complete the minor. A minimum of 12 credits must be earned by completing 4 of the following courses:

SP-100-SP-299, beginning and intermediate courses (12 credits maximum)	0-12
SP-300-SP-499, advanced courses (6 credits minimum)	6-18
Total Credits	18

(Students with advanced knowledge of Spanish should begin at 300-level)

SP 210 and SP211 (or 2 other Spanish language courses at the 300-level) can be applied towards the Minor in Spanish for Health Professionals.

Students who take the CLEP exam (Academic Success) and score 64 or higher will only need to complete two additional 300 SP level courses to meet all minor requirements.

Professors Emeriti

- Helen G. Agbay, Spanish (1974)
- Dr. Joshua U. Aisiku, Education (2009)
- Dr. Francisco Alcala, Spanish (1996)
- Dr. M. June Allard, Psychology (2005)
- Francis I. Amory, Urban Studies (2009)
- Dr. Eleanor Ashton, Psychology (2004)
- Charles D. Avedikian, Mathematics and Computer Science (1990)
- James R. Ayer, Languages and Literature (2000)
- Vera M. (Dowden) Baldwin, Education (1974)
- Nora M. Barraford, English (1984)
- William A. Belanger, Earth, Environment, and Physics (2016)
- Dr. Andrea Bilics, Occupational Therapy (2015)
- Dr. Elizabeth T. Binstock, Education (2002)
- Dr. Richard C. Bisk, Mathematics (2015)
- Dr. Lynn G. Bloomberg, Health Sciences (2016)
- Dr. Edwin A. Boger, Biology (2000)
- Dr. Arnold J. Bornfriend, Business Administration and Economics (2000)
- Dr. Margaret P. Bouchard, Education (2016)
- Dr. Peter M. Bradley, Biology (2016)
- Jacqueline Brennan, Occupational Therapy (2017)
- Betsey J. Brenneman, Library (2016)
- Dr. Nancy Brewer, Health Science (2012)
- Francis L. Brooker, Sociology (2012)
- Dr. Anne M. Brown, Nursing (2002)
- Dr. Josefina S. Bunuan, Education (1999)
- Michael A. Burke, Health Science (1998)
- Dr. Philip J. Burns, English (2013)
- William Byers, Communications (2002)
- Dr. Jean A. Campaniello, Psychology (2002)
- Dr. Doris M. Carter, Visual and Performing Arts (1998)
- Jacqueline G. Casale, Art (1991)
- Dr. Jennie M. Celona, French (1996)
- Louis J. Celona, Music (1992)
- Dr. Harold L. Chapman, Physics (1988)
- Carol Chauvin-Fortier, Biology (1993)
- Dr. Yvonne Chen, Health Sciences (2001)
- Dr. Kee Il Choi, Business Administration and Economics (1992)
- Anna B. Cohen, Communication Disorders (1999)
- Bruce C. Cohen, History and Political Science (2016)
- Dr. Alan D. Cooper, Chemistry (2014)
- Phyllis A. Crowley, English (1996)
- Dr. Joyce Cummings, Psychology (2002)
- Philip S. Dalton, History and Political Science (2000)
- Aldona Daly-Boxshus, Psychology (1995)
- Krishna DasGupta, Library (2011)
- Dr. Paul Davis, Media, Arts and Philosophy (1992)
- Vincent R. DeBenedictis, Foreign Languages (1990)
- Clement S. Delaney, History and Political Science (2008)
- Dr. Barbara A. Desrosiers, Psychology (1998)
- Daniel E. Dick, Natural and Earth Sciences (1989)
- Dr. John R. Dowling, Education (1998)
- Helen B. Duquette, Physical Education (1992)
- Francis T. Dyson, Physical Education (1993)
- Alfred F. Eddy, English (1990)
- Robert P. Ellis, English (1995)
- Dr. Guillermina Elissondo, World Languages (2016)
- Dr. Leonard F. Farrey, Business Administration and Economics (2002)
- Dr. Arthur Ferguson, Chemistry (2006)
- Dr. James E. Foley, English (2016)
- Dr. Vivian C. Fox, History and Political Science (2004)
- Florence Fraumeni, Education (1985)
- Dr. Linda Fuller, Communications (2000)
- Yvonne Gallant-Martel, French (1977)
- Dr. Geoffrey J. Garrett, Physical and Earth Science (2004)
- Dr. C. Kenneth Gibbs, English (2010)
- James E. Girouard, Physical Education (1985)
- Bernard Goldsmith, History and Political Science (1995)
- Dr. Merrill H. Goldwyn, Languages and Literature (1998)
- Dr. John Goodchild, Chemistry (2013)
- Dr. Linda S. Gordon, Languages and Literature (2003)
- Loren N. Gould, Natural and Earth Sciences (1993)

- Dr. Terry E. Graham, Biology (2003)
- Emmet J. Grandone, Languages and Literature (1998)
- Ruth E. Greenslit, Library (1989)
- Dr. Ruth Haber, English (2015)
- Sandra A. Hall, Nursing (2002)
- Dr. Nancy E. Harris, Education (1999)
- Dr. Margaret D. Hart, Occupational Therapy (2016)
- Dr. Robert J. Hartwig, Business Administration and Economics (2004)
- Mary T. Hayes, Education (1974)
- Bruce Henry, Mathematics and Computer Science (2001)
- Mary Ellen Herx, English (1989)
- Dr. Nancy Hicks, Physical and Earth Science (2005)
- Dr. W. Mack Hill, Mathematics (2004)
- David W. Hilton, Computer Science (1999)
- Dr. Donald D. Hochstetler, Library (2012)
- Paul A. Holle, Biology (1989)
- Richard G. Hunt, Physical and Earth Science (2007)
- Ronald W. Hurd, Physical and Earth Science (2004)
- Marion J. Jennings, Education (1978)
- Alfred C. Johnson, Mathematics (2004)
- Jean E. Johnson, English (1990)
- Nancy A. Johnson, Education (1995)
- Dr. Joline N. Jones-Matheson, Psychology (2006)
- Dr. Donna M. Joss, Occupational Therapy (2004)
- Dr. Donald L. Joyal, Business Administration and Economics (2008)
- Dr. Joan K. Juralewicz, Education (2002)
- Dr. Richard S. Juralewicz, Business Administration and Economics (2001)
- Robert G. Kane, History (1999)
- George T. Kelley, Economics (1997)
- Robert F. Kelley, Physics (1988)
- Dr. Baheej B. Khleif, Sociology (1994)
- Dr. Richard K. Kimball, Psychology (2016)
- Margaret A. Kittredge, Spanish (1995)
- Sandra Kocher, Art (1992)
- Dr. Ellen V. Kosmer, Visual and Performing Arts (2004)
- Professor Marshall J. Kotzen, Mathematics (2013)
- Jerome L. Langer, Business Administration (1982)
- Edward H. Leonard, Physics (1984)
- Robert E. Lingner, Physical and Earth Sciences (2005)
- Dr. Mary Lou Lovering, Nursing (2000)
- Dr. Augustus N. Luparelli, Business Administration and Economics (2014)
- Dr. Carol E. Lysaght, Communication Disorders (1996)
- Alison K. Majeau, Library (2016)
- Dr. Gordon S. Matheson, Psychology (2004)
- Gary W. McEachern, Business Administration and Economics (1998)
- Bernard L. McGough, Media (1994)
- Robert F. McGraw, History (1991)
- Pamela McKay, Senior Librarian, Library (2013)
- John F. McLaughlin, Communication Disorders (1996)
- Professor, Catherine McNeil, Occupational Therapy (2013)
- Dr. Mary Ellen Meegan, Education (2009)
- Dr. Melvin Merken, Chemistry (2010)
- Michel D. Merle, Visual and Performing Arts (2005)
- Frank S. Minasian, History and Political Science (2016)
- Dr. A. Gibbs Mitchell, History (1996)
- John P. Mockler, Physical Education (1992)
- Dennis P. Moore, Business Administration and Economics (2012)
- Dr. Pearl Mosher-Ashley, Psychology (2011)
- Michael E. Mulcahy, Mathematics (2005)
- Dr. John M. Nash, Psychology (1993)
- Francis J. O'Connor, Spanish (1980)
- Dr. Patrick O'Connor, Education (2016)
- Richard A. O'Connor, Psychology (1994)
- Dr. Virginia Ogozalek, Computer Science (2003)
- Professor, Catherine McNeil, Occupational Therapy (2013)
- Paul F. O'Neil, Education (1997)
- Dr. Juan Orbe, Spanish (2014)
- Dr. Chad C. Osborne, Education (2002)
- Dr. Ruth Ostenson, Psychology (2002)

- Dr. Surindar Paracer, Biology (2013)
- Dr. Robert F. Perry, Geography (1987)
- Dr. Robert J. Perry, Mathematics (2008)
- Vincent Piccolo, Media (1988)
- Dr. Frank C. Pizziferri, Sociology (1995)
- Dr. Maryann C. Power, Communication Sciences and Disorders (2011)
- Dr. Maureen E. Power, Urban Studies (2016)
- Dr. Vincent E. Powers, Urban Studies (2000)
- Catherine I. Quint, Education (1985)
- Dr. David Quist, Education (2003)
- Dr. Donald A. Read, Health Sciences (2001)
- Dr. Robert Redding, Mathematics (2004)
- Dr. Susan V. Rezen, Communication Sciences and Disorders (2008)
- Gerald Robbins, Philosophy (2007)
- Dr. Jeffrey L. Roberts, Languages and Literature (2001)
- Dr. Thomas L. Roberts, Biology (1988)
- Evelyn Robinson, Mathematics (1978)
- Dr. Helen M. Rogers, Nursing (2006)
- Bruce D. Russell, Biology (2003)
- Dion Schaff, Philosophy (1993)
- Helena Semerjian, Health Sciences (2016)
- Robert L. Shafner, Business Administration and Economics (2010)
- Helen G. Shaughnessy, Education (1986)
- Dr. Courtney Schlosser, Philosophy (2013)
- Dr. Maureen D. Shamgochian, Biology (2016)
- Dr. Ann Marie Shea, Visual and Performing Arts (2005)
- Dr. Emmett A. Shea, History and Political Science (2012)
- Dr. Katherine M. Shea, Foreign Languages (1991)
- Dr. Robert M. Spector, History and Political Science (2008)
- Dr. Maureen C. Stefanini, Business Administration and Economics (2016)
- William L. Sullivan, English (1983)
- Professor, James J. Swanson, Business Administration/Economics (2015)
- Dr. Elaine G. Tateronis, Dean, School of Education Health and Natural Sciences (2012)
- G. Flint Taylor, Psychology (1985)
- Robert W. Thompson, Physical and Earth Sciences (2005)
- Anthony W. Thurston, Biology (1983)
- Dr. Donald F. Traub, Philosophy (1998)
- F. Stephen Trimby, Business Administration and Economics (2004)
- Richard S. Tyrell, English (1994)
- Professor David J. Twiss, History/Political Science (2015)
- Dr. Andrea J. Wallen, Nursing (2011)
- LLoyd P. Wheaton, Chemistry (2002)
- Dr. James R. Wicka, Communication Sciences and Disorders (2006)
- Dr. Audrey E. Wright, Education (2016)
- Dr. Gary G. Young, Business Administration and Economics (2002)
- Dr. Cheng Yuan, History and Political Science (2000)
- Dr. Manuel Zax, Mathematics (1992)
- Faith T. Zeadey, Sociology (2003)
- Matthew Zelman, Sociology (2004)
- Dr. Estelle C. Zoll-Resnik, Chemistry (1997)

Officials of Worcester State University

Department of Higher Education Board Members

Chris Gabrieli, Chairman

Sheila M. Harrity, Ed.D.

Nancy Hoffman, Ph.D.

Tom Hopcroft

Donald R. Irving, State University Trustee Representative

Robert E. Johnson, Ph.D.

J.D. LaRock, J.D., Ed.D., Community College Trustee Representative

Dani Monroe

James Peyser, Ex Officio

Fernando M. Reimers, Ed.D.

Henry Thomas III, J.D., University of Massachusetts Trustee Representative

Paul F. Toner, J.D.

Owen Wiggins, Student Member

Non-Voting Student Advisors
Jahziel Chase, Community College Student Advisor

Worcester State University Board of Trustees

George H. Albro '65, M.Ed. '68

Craig L. Blais, Chair

Aleta M. Fazzone

Maryanne M. Hammond '69, '72 M.Ed., Vice Chair

Karen M. LaFond

Corey Laite '17

Stephen F. Madaus, Vice Chair

Dina A. Nichols

Shirley A. Steele '59, M.Ed. '63

Marina L. Taylor

David H. Tuttle '01

Presidents of Worcester State University

Elias Harlow Russell 1874-1909

Francis Ransom Lane 1909-1912

William B. Aspinwall 1912-1939

Clinton Carpenter 1940-1946

Eugene A. Sullivan 1947-1970

Robert E. Leestamper 1970-1975

Joseph J. Orze 1975-1982

Philip D. Vairo 1982-1991

Kalyan K. Ghosh 1992-2002

Janelle C. Ashley 2002-2011

Barry M. Maloney 2011-

Alumni Association and Foundation Board

Alumni Association's Advisory Board 2016-2017

President

Michael J. Mills '72

Vice President

Elizabeth A. Bitar '11

Secretary

Jacqueline M. Trotta '69, M.Ed. '74

Executive Committee at Large

Kathryn M. Portle '69
Eric S. Swedberg '02, M.A. '10

Directors

John A. Ahern '80
James C. Celona '12

Kurt Correia '16
Terry Dorsey-Potts '73
Daniel Duclos '11
Veto F. Filipkowski '62, M.Ed. '66
Elizabeth N. Gilgun '92
Tara A. Hancock, M.S. '06, Director of Alumni
Trevor R. Hodde '12
Todd D. Jarvis '86
Joseph J. Klimavich '74
David Meyers '76
Deirdre A. Olson O'Connor '71
Beth Sannella '69, M.Ed. '73
Theresa A. Smith '83

SGA President–Student Representative

Monica Bhakhri '18

Foundation Board Members

Chair

Craig A. Bovaird '77

Vice Chair

Ann L. DeBiasio '79

Vice Chair

James D. Glickman

Treasurer

Edward L. Sherr

Assistant Treasurer

Robin J. Quill

Immediate Past Chair

Mary C. Ritter

President & Clerk

Thomas M. McNamara '94

Directors

George H. Albro '65
Greta Bajrami Campoverde
David E. Bedard '74
John P. Brissette '88
Matthew Cote
Geovanna I. Diaz '12
Meaghan Dougherty '19, Student Senate Chair, Ex. Officio
Allen J. Falke '93, Esq.
Mary Burke Fallon
Ellen J. Gaucher, '76, MSN, MSPH, FAAN
Christopher J. Grondin '97
Maryanne M. Hammond '69, Board of Trustees Representative
Warren D. Hayden '86
Kristina M. Jackson '93
Renee A. King '12
Stephen F. Madaus, Board of Trustees Representative
Barry M. Maloney, Ex. Officio
Dorothy Manning, M.Ed. '88
Rosanne Sullivan Matulaitis '65
Michael J. Mills, '72, AAAB Representative
Satya B. Mitra, Ph.D.
Robert J. Morton '87
Suzanne Singh Nebelung, M.Ed. '00
John J. O'Brien
Alan Osmolowski, CPA '91
Stephen R. O'Toole
Gregg H. Rosen '86
Robert J. Spain '78
Peter J. Staiti '02
George W. Tetler, III
Steven J. Ward '76
Randal D. Webber '91

Administrative Offices

Office of the President

Barry M. Maloney, President of the University, President's Office (2011) B.S., M.A., University of Maine, Orono

Patrick D. Hare, Staff Assistant/Assistant to the President, President's Office (2014) B.S., M.S., Worcester State University

Carl A. Herrin, Assistant to the President for International Community and Government Affairs, President's Office (2012) B.A., Georgetown University

Nicole D. Kapurch, Staff Associate/Special Assistant to the President, President's Office (2012) B.A., Worcester State College

Renae Lias Claffey, Assistant to the President for Campus Communications, President's Office (2013) Graduate Certificate, B.A., University of North Carolina Chapel Hill

Michael W. McKenna, Director of Conference and Event Services, Conference and Event Services (2017) B.A., Stonehill College; M.A., Bridgewater State University

Michael P. Priest, Staff Associate, Conference and Event Services (2015) B.S., M.P.H., Adelphi University

Academic Affairs

Anthony K. Adade, Associate Vice President & Chief Information Officer, Information Technology Services (2013) B.S., Northeastern University; M.S., Ph.D., Lesley University

Rosemary L. Ahmadi, Staff Associate/Instructional Designer, Information Technology Services (2014) B.A., Worcester State College; M.A., Clark University

Matthew M. Bejune, Executive Director, Library (2013) B.A., University of Massachusetts Amherst; M.S., Syracuse University

Laxmi Bissoondial, Assistant Director, Multicultural Affairs (2012) B.S., Worcester State College; M.Ed., C.A.G.S., University of Massachusetts Amherst

Kenton Brister, Staff Assistant/Lab and Administrative End User Support, Information Technology Services (2014) A.S., Quinsigamond Community College

Joan Butterworth, Staff Assistant/Clinical Supervisor, Communication Sciences and Disorders (2008) B.S., Northeastern University; M.S., Purdue University

Tarik Buxton, Staff Assistant/Database Programmer/Administrator, Information Technology Services (2014) B.S., Worcester State University

Andrew Calcutt, Staff Associate/Server Support Specialist, Information Technology Services (2006)

Candice P. Casey, Staff Associate/Director of the Krikorian Gallery and Gallery Store, Worcester Center for Crafts (2013)

Laura A. Caswell, Staff Associate/Data Administrator, Information Technology Services (1998) A.S., Quinsigamond Community College; B.S., Worcester State College

Marilyn A. Cleary, Assistant Dean, Graduate and Continuing Education (2016) B.S., M.B.A., Worcester Polytechnic Institute

Cherie L. Comeau, Director of the Center for Business and Industry, Graduate and Continuing Education (2015) B.A., Dartmouth College; M.B.A., University of Massachusetts Amherst

Suzanne Crawford-Stacy, Staff Assistant/Clinical Instructor, Communication Sciences and Disorders (2013) B.S., Worcester State College; M.S., University of Vermont

Edward J. Crowley III, Staff Assistant/Student and Administrative User Support, Information Technology Services (2014) A.S., Quinsigamond Community College

Huy Dao, Staff Associate/Network Manager, Information Technology Services (1998) B.S., M.S., Worcester State University

Chelsea L. David, Staff Associate/Assessment Coordinator, Academic Success Center (2016) B.A., University of Massachusetts Amherst; M.Ed., Springfield College

Gert Dervishaj, Staff Associate/Student and Administrative IT Support Manager, Information Technology Services (2016) B.S., Worcester State University

Gina-Marie Fleury, Staff Associate/Clinical Resources Coordinator, Nursing (2012) A.S., Quinsigamond Community College; A.D.N., Mt. Wachusett Community College; B.S., M.S., Worcester State University

Telese Forbes, Staff Assistant, Graduate and Continuing Education (2001) A.S., Springfield Technical Community College; B.S., M.S., Worcester State University

Antonio F. Garcia, Staff Assistant/Database Specialist, Information Technology Services (2016) B.S., Worcester Polytechnic Institute; M.S., Worcester State University

Patricia George, Staff Associate/Academic Fieldwork Coordinator, Occupational Therapy (1998) B.S., M.S., Worcester State College

TaChalla Gibeau, Staff Assistant, Academic Affairs (2014) B.S., Worcester State University

Catherine A. Goodwin, Staff Assistant/ESL Instructor, Graduate and Continuing Education (2009) B.A., Mount Holyoke College; M.A., School for International Training

Sara J. Grady, Associate Dean, Graduate and Continuing Education (2008) B.A., M.B.A., Assumption College

Victoria Gruzynski, Assistant Librarian-Information Literacy, Library (2016) B.A., Illinois State University; M.A., M.S., Indiana University

Nelson E. Guaman, Staff Assistant/End User Support Services, Information Technology Services (2002) B.S., M.Ed., Atlantic Union College; M.A., Worcester State University

Leah Guzman, Staff Assistant/Program Coordinator, Intensive English Language Institute (2007) B.A., B.S., M.S., Worcester State College

Honee A. Hess, Executive Director, Worcester Center for Crafts (2012) M.A.T., Julane University; B.A., C.O.E., College University of CO, Florence Italy Reynaldo House Museum of American Art

Joanne S. Jaber Gauvin, Staff Assistant, Intergenerational Urban Institute (2016) B.A., University of Massachusetts Dartmouth; M.Ed., Suffolk University

Susan L. Johnson-Hood, Staff Assistant/Theatre/ Costume/Designer, Visual and Performing Arts (2011) B.F.A., Arizona State University; M.F.A, University of Minnesota

Kevin K. Karanja, Staff Associate/Upward Bound Coordinator, Multicultural Affairs (2016) B.S., Worcester State University

Roberta L. Kyle, Associate Vice President, Graduate and Continuing Education (2008) B.A., M.A., University of New Hampshire; M.A., School for International Training; Ed.D., University of San Francisco

Monique M. Labelle, Staff Assistant to the Dean-School of Humanities and Social Sciences, Academic Affairs (2010) B.A., Clark University

Linda S. Larrivee, Dean, School of Educational Health and Natural Sciences (2013) B.S., M.S., Worcester State College; Ph.D. University of Kansas

Gina Lavallee, Staff Assistant, International Programs (2013) B.A., M.Ed., Worcester State University

Colleen E. Laviolette, Assistant Director/ Administrative Services, Information Technology Services (1983) B.S., Worcester State College

Jeffrey R. LeBrun, Assistant Director/Help Desk Service/End User/Academic Services, Information Technology Services (2008) B.S., Worcester State College; M.S., Worcester State University

Nathan K. Lee, Staff Assistant/Theatre Technical Director, Visual and Performing Arts (2011) B.A., M.F.A., University of Hawaii at Manoa

Raynold M. Lewis, Professor/Associate Dean for Education School of Education, Education (1998) B.A., West Indies College; M.Ed., Worcester State College; Ph.D., Illinois State University

Ramsay MacInnes, Staff Assistant/End User Support Services, Information Technology Services (1999)

Mary Jo Marion, Assistant Vice President for Urban Affairs and Executive Director, Latino Education Institute (2008) B.A., Suffolk University; M.A., University of Chicago

Michael J. Mayko, Staff Associate/Lab Instructor, Biology (2009) B.S., M.S., Worcester State University

David Needham, Staff Assistant/University Training and Support Specialist, Information Technology Services (2009) B.S., Worcester State University

Cuong C. Nguyen, Staff Assistant/Network Administrator, Information Technology Services (2011) A.S., Quinsigamond Community College; B.S., Worcester State University

Thomas P. O'Malley, Staff Associate/Program Liaison, Worcester Center for Crafts (2009) B.F.A., Alfred University; M.F.A., Rhode Island School of Design

Rita V. Offiaeli, Staff Associate/Academic Advisor/ Tutoring Coordinator, Academic Success Center (2016) B.A., University of Saint Thomas; M.A., Ph.D., University of Connecticut

Sylvania Okoye, Staff Assistant/Academic Advisor, Academic Success Center (2017) B.A., Wheaton College; M.Eng., Lehigh University

Deirdre Palmer, Staff Assistant Nursing Lab Coordinator, Nursing (2015) B.S.W., Marist College; B.S.N., Mass College of Pharmacy

Katey C. Palumbo, Director, International Programs (2010) B.S., University of Miami; M.Ed., Fitchburg State University

Russ Pottle III, Dean of the School of Humanities and Social Sciences, School of Humanities and Social Sciences (2017) B.A., M.A., Southeastern Louisiana University; Ph.D., Louisiana State University

Jorge J. Poueriet Rolffot, Staff Associate/Senior Windows Server and Telephony Administrator, Information Technology Services (2004) B.A., Universidad Dominicana O&M

Shay A. Powell, Staff Assistant/Academic Advisor, Academic Success Center (2017) B.A., M.P.A., Westfield State University

Shu Qian, Assistant Librarian, Library (2016) B.S., M.S., Shanghai University; M.S., Florida State University

Susan L. Rainville, Staff Assistant to the Dean-School of Education Health and Natural Sciences, Academic Affairs (1995)

Hilda Ramirez, Assistant Director Public Policy and Program Incubation, Latino Education Institute (2012) A.A., Bay State College; B.A., Lesley University; M.Ed., Harvard University

John J. Reardon, Associate Director of Network and Infrastructure Services, Information Technology Services (2003) B.S., Bridgewater State College

Kristina L. Rearick, Staff Assistant/Database Coordinator/Research Analyst, Assessment and Planning (2011) B.A., B.A., University of Massachusetts Amherst; M.S., Ed.D., American International College

Gale N. Scott, Staff Associate/Director of the Glass Studio and Head of Metals Department, Worcester Center for Crafts (2013) B.F.A., University of Illinois, Urbana/Champaign; M.F.A., Massachusetts College of Art

Susan Seibel, Director Intensive English Language Institute (IELI), Graduate and Continuing Education (2006) B.A., Clark University; M.Ed., Worcester State College; C.A.G.S., University of Massachusetts Amherst

William E. Shakalis, Associate Librarian, Library (2010) B.A., Villanova University; M.S., Simmons College

Kenneth A. Smith, Director, Institutional Research (2006) B.A., Southeastern Louisiana University; M.B.A., University of Mississippi

Robert Soderman, Staff Associate/Information Technology Support Specialist, Information Technology Services (2000) A.S., Quinsigamond Community College

Sarah L. Strout, Assistant Vice President for Assessment and Planning, Assessment and Planning (2017) B.A., Assumption College; M.A., Ph.D., Clark University

Tammy L. Tebo, Assistant Dean for Academic Services, Academic Affairs (2013) B.A., Westfield State College; M.Ed., Springfield College

Henry C. Theriault, Associate Vice President for Academic Affairs, Academic Affairs (2008) B.A., Princeton University; Ph.D., University of Massachusetts

Nathalie K. Torres Serrano, Staff Assistant, Academic Affairs (2017)

Marcela A. Uribe-Jennings, Assistant Dean/Director, Multicultural Affairs (1982) B.S., M.Ed., Worcester State College

Ann T. Veneziano-Korzec, Director, Speech Language Hearing Center (1988) B.A., Boston College; M.S., Syracuse University

Colleen F. Wheaton, Director of the Academic Success Center First-Year and Transfer Services, Academic Success Center (2011) B.A., M.Ed., Suffolk University

Thomas R. White, Assistant Director Multimedia Services, Information Technology Services (1980)

Lois A. Wims, Provost/Vice President, Academic Affairs (2015) B.S., Bryant College; M.S., Salve Regina; Ph.D., University of Rhode Island

Administration and Finance

Stephen M. Bandarra, Staff Associate/Sustainability Coordinator, Facilities (2012) B.S., Providence College

Brenda Bussey, Director, Procurement and Accounts Payable (2011) B.S., B.A., Northeastern University; M.B.A., Suffolk University

Julie C. Carmel, Director/Student Accounts Manager, Bursar (1992) A.B., Becker Junior College

Linda M. Crocker, Staff Assistant, Administration and Finance (2008) B.A., Eisenhower College

Carole A. Cronin, Staff Assistant/OneCard Administrator, Bursar (1985) B.S., Worcester State College

Robert P. Daniels, Associate Director Health and Safety Officer, Facilities (2004)

Kathleen M. Eichelroth, Chief Financial Officer & Vice President, Administration and Finance (1998) B.A., University of Massachusetts Dartmouth; CPA, Massachusetts

Carol A. Faron, Staff Assistant, Human Resources (1997)

Peter M. Fenuccio, Associate Director, Facilities (2004)

Stephen G. Gillis, Associate Director, Facilities (2012) B.S., Northeastern University

Betsy L. Green-Baker, Staff Associate/Controller, Worcester Center for Crafts (2011) B.S., University of New Hampshire; M.B.A., Seattle University

Eric W. Hansen, Associate Director, Facilities (2012) B.S., Western New England College

Edward M. Horniak, Staff Assistant/Supervisor of Trades, Facilities (2010)

Anisa Hoxha, Director of Budget/Planning and Policy Development, Administration and Finance (2012) B.S., Nichols College; M.S., Worcester State University

Suze Jean-Charles, Staff Assistant/Benefits Administrator, Human Resources (2014) B.A., M.A., Clark University

Kayla Klemba, Staff Assistant, Bursar (2012) B.A., Worcester State University

Debra A. Kuczka, Staff Assistant to the Vice President, Administration and Finance (2009) B.S., Worcester State College

Mark A. LaCroix, Assistant Director, Publications and Printing Services (2008) A.S., Quinsigamond Community College

Heather M. Lamarche, Staff Assistant/Financial Analyst, Administration and Finance (2014) B.S., Worcester State University

Nicole LeBlanc, Assistant Director, Procurement and Accounts Payable (2014) A.S., Quinsigamond Community College

Stacey A. Luster, Assistant Vice President, Human Resources, Payroll Services & Affirmative Action and Equal Opportunity (2015) B.A., St. John's University; J.D., Boston University

Susan L. Moore, Director, Human Resources (2015) B.A., University of Massachusetts Lowell; M.A., Framingham State College

Sandra K. Olson, Director, Facilities (2003) B.S., Worcester Polytechnic Institute; M.B.A., Clark University

Mary Renee Polakowski, Staff Assistant/Manager, Administration and Finance (2010) B.S., Assumption College

Robin J. Quill, Associate Vice President, Administration and Finance (2003) B.S., Worcester State College

Nancy M. Ramsdell, Director, Administrative Services (2005)

Ralph M. Ricci, Staff Assistant/Supervisor Central Services, Administrative Services (1992)

Matthew B. Richardson, Assistant Director University Grounds, Facilities (2015) B.S., University of Rhode Island

Lynn B. Ryan, Director, Payroll (1992) B.S., M.S., Worcester State College

Melissa A. Staiti, Staff Assistant/Manager, Administration and Finance (2005) A.A., Becker College; B.A., Worcester State College

Isaac D. Tesfay, Director, Diversity Inclusion, Affirmative Action and Equal Opportunity (2012) B.A., College of the Holy Cross; M.B.A., Clark University; ABD University of Massachusetts Boston

Enrollment Management

Alexandra M. Bellerose, Staff Associate/Coordinator of Admissions Communications, Admissions (2013) B.A., Assumption College

Kimberly D. Brothers-Caisse, Staff Assistant/ Marketing Content Manager, Marketing (2007) B.S., James Madison University

Tiana D. Carrasquillo, Associate Director of Admissions, Admissions (2013) B.A., University of Connecticut, Storrs; M.Ed., University of Massachusetts Amherst

Julie A. Chaffee, Registrar, Registrar (1994) B.A., St. Anselm College

Rebecca L. DesRoches, Associate Director/Social Media Brand Manager, Marketing (2005) B.S., B.A., Western New England College; M.S., Rensselaer Polytechnic Institute

Joseph J. DiCarlo, Director, Admissions (2012) B.A., Assumption College; M.A., Framingham State University

Kirshner Donis, Associate Director, Admissions (2003) B.A., Clark University; M.S., Worcester State College

Christopher J. Dooley, Assistant Director, Admissions (2005) B.S., Becker College

Jennifer A. English, Associate Director, Financial Aid (1999) B.A., Mount Holyoke College

Deborah C. Fields Quinn, Staff Associate to the Vice President, Enrollment Management (1997)

Ryan G. Forsythe, Vice President, Enrollment Management (2014) B.S., Westfield State University; M.Ed. University of Massachusetts Amherst; Ed.D., Trevecca Nazarene University

Nathan M. Herrera, Staff Assistant/Marketing Coordinator, Marketing (2015) A.S., New England Tech; B.A., Worcester State University

Kathleen T. Keegan, Staff Assistant/Financial Aid Advisor, Financial Aid (1998) B.A., Worcester State College

Benjamin T. McElroy, Assistant Director, Admissions (2000) B.A., Worcester State College

Jayne A. McGinn, Director, Financial Aid (1998) B.A., M.S., Worcester State University

Sarah E. McMaster, Director, Marketing (2016) B.A., University of California Davis; M.A., Brown University

Kimberly A. Oikle, Staff Assistant, Financial Aid (2008) B.S., Worcester State College

Margaret F. Shagro, Staff Assistant/Counselor, Financial Aid (1997) B.A., St. Michael's College

Jonathan P. Tegg, Assistant Director of Marketing, Marketing (2017) B.Sc., University of Bradford, UK

Maribeth Wrobel, Associate Registrar, Registrar (2003) B.S., M.S., Worcester State College

Student Affairs

Jillian M. Anderson, Director, Career Services (2007) B.A., Westfield State College; M.Ed., Worcester State University

Dirk Baker, Staff Assistant, Athletics (2000) B.A., Ed.M., Ed.D., Boston University

Dean D. Bowen, Assistant Director/Fitness Center Manager, Athletics (2016) B.S., M.S., The College at Brockport, SUNY

Katherine L. Cleary, Assistant Director, Residence Life and Housing (2016) B.A., Kent State University; M.A., Slippery Rock University

Kelly K. Downs, Staff Assistant, Athletics (2012) B.A., Bridgewater State University; M.A., Endicott College

Kevin J. Fenlon, Staff Assistant/Counselor, Counseling Services (2008) B.A., M.A., Assumption College

Adrian C. Gage, Assistant Dean/Director, Residence Life and Housing (2005) B.S., Oklahoma State University; M.Ed., Clemson University

Rebecca L. Giard, Staff Assistant/Residence Director, Residence Life and Housing (2013) B.S., Nichols College

Julie A. Glovin, Staff Assistant/Counselor, Counseling Services (2016) B.A., Tulane University; M.S.W., Boston University

Sheldon K. Henry, Staff Assistant/Intramural Program and Night/Weekend Manager, Athletics (2016) B.A., M.S., Southern Connecticut State University

Alan E. Jackson, Director of Veteran Services, Student Affairs (1983) A.B., Southern Massachusetts University; M.Ed., Worcester State College

Bridget P. Joiner, Staff Assistant to the Dean, Student Affairs (2012)

Jason M. Kapurch, Chief/Director, University Police (1991) B.S., Worcester State University

Joshua L. Katz, Staff Associate/Judicial Coordinator, Office of Student Conduct (2006) B.A., Worcester State University

Julie A. Kazarian, Dean/Senior Student Affairs Officer, Student Affairs (2000) B.A., M.S., Worcester State College

Thomas Kelley, Associate Director, Residence Life and Housing (2014) B.A., Westfield State University; M.S., University of Rhode Island

David A. Lindberg, Assistant Director, Athletics (1994) B.S., Worcester State University

Kevin M. MacLennan, Staff Assistant/Assistant Athletic Trainer, Athletics (2003) B.A., Westfield State College

Frances R. Manocchio, Assistant Dean of Student Affairs/Director, Student Accessibility Services (2011) B.A., Merrimack College; M.A., C.A.G.S., Assumption College

William J. Marrier, Interim Assistant Director, University Police (2006)

Dianne E. Matos, Assistant Director, Career Services (2004) M.A., St. Michael's College; M.Ed., Suffolk University

Kelly J. McGill Seega, Staff Assistant/Disability & Learning Specialist, Student Accessibility Services (2013) B.S., Framingham State College; M.A.T., Sacred Heart University

Kristie M. McNamara, Associate Director, Student Involvement and Leadership Development (2001) B.A., Framingham State College; M.Ed., Bridgewater State College

Jessica Meany, Staff Associate/Head Athletic Trainer, Athletics (2002) B.A., M.Ed., Worcester State College

John W. Meany, Associate Director, Athletics (2004) B.A., Middlebury College

Michael A. Mudd, Director, Athletics (2014) B.A., St. Lawrence University; M.S., Miami University

Laura A. Murphy, Assistant Dean/Director of Counseling Services, Counseling Services (1989) B.A., M.A., C.A.G.S., Assumption College

Nikki M. Narducci, Staff Assistant/Sports Information Director, Athletics (2015) B.A., University of Connecticut; M.S., Texas A&M International University

Rosemary Naughton, Associate Dean, Student Affairs (2001) B.A., Anna Maria College; M.Ed., Worcester State College

Kristen A. Nelson, Associate Director, Residence Life and Housing (2009) B.A., Keene State College; M.S., C.W. Post-Long Island

Eileen R. O'Brien, Staff Assistant/Career Services Coordinator, Career Services (2017) B.A., M.A., Assumption College

Adam P. Peloquin, Staff Assistant/Contest Coordinator, Athletics (2016) B.A., M.A., Worcester State University

Sarah E. Potrikus, Staff Assistant/Coordinator, Student Involvement and Leadership Development (2013) B.S., Eastern Connecticut State University; M.S., University of Rhode Island

Jennifer A. Quinn, Staff Associate/Health and Wellness Educator, Counseling Services (2010) B.S., M.Ed., Worcester State College

Talita G. Rodovalho, Staff Assistant/Counselor, Counseling Services (2016) B.A., Framingham State College; M.Ed., Cambridge College

David J. St. Martin, Staff Assistant/Emergency Management Planner/Technical Service Coordinator, University Police (1999) B.S., Worcester State College

Carrie E. Stevens, Staff Assistant/Residence Director, Residence Life and Housing (2005) B.A., Worcester State College

Karen E. Tessmer, Associate Director/Assistant Athletic Director, Athletics (1994) B.A., Gettysburg College; M.A., James Madison University

Sarah T. Valois, Staff Assistant/Counselor, Counseling Services (2016) B.A., Clark University; M.S.W., Boston College

Mark Wagner, Director, Center for Service Learning and Civic Engagement (2012) B.A., University of Massachusetts Amherst; M.A., Boston University; Ph.D., Royal Melbourne Institute of Technology

Jason S. White, Staff Associate/Parking Manager, University Police (2008)

Winfield Ye, Staff Assistant/Residence Director, Residence Life and Housing (2016) B.A., California State University

University Advancement

Camilla H. Caffrey, Assistant Vice President Alumni Relations and Engagement, University Advancement (1997) B.A., The College of the Holy Cross

Marion Catacchio, Director of Financial Records, University Advancement (1997) B.S., Worcester State College; M.S., Bentley College

Sean Festa, Staff Associate/University Advancement Financial Records, University Advancement (2017) B.S., Worcester State University

Lisa G. Godfrin-Saulnier, Director of Advancement Services, University Advancement (2006) A.S., New England Institute of Technology; A.A., Community College of Rhode Island; B.S., Worcester State University

Tara A. Hancock, Director of Alumni, University Advancement (2005) B.A., University of Massachusetts Amherst; M.S., Worcester State College

Thomas M. McNamara, Vice President, University Advancement (1998) B.A., Worcester State College

Kristen K. O'Reilly, Director of Advancement Communications, University Advancement (2015) B.A., University of Connecticut; M.B.A., Nichols College

Karen E. Sharpe, Assistant Vice President of Development, University Advancement (2011) B.A., Clark University; M.A., Fitchburg State College

Louise Q. Taylor, Staff Assistant to the Vice President, University Advancement (2004)

Sierra R. Trudel, Assistant Director Advancement Services, University Advancement (2014) B.S., M.B.A., University of Massachusetts Boston

Directions to Campus

By Auto

From Massachusetts Turnpike (I-90):
Take Exit 10 (Auburn) to Rt. 290 East. (see from 290 East)

From Rt. 495:
Take Exit 25 to Rt. 290 West. (see from 290 West)

From Rt. 9 West:
Follow Rt. 9 West into Worcester. (see from Highland Street)

From Rt. 146 North:
Take Rt. 146 North to Rt. 290 East. (see from 290 East)

From Rt. 190 South:
Take Rt. 290 West. (see from 290 West)

From Rt. 290 West:
Take Exit 18 (Rt. 9 West); turn right off exit ramp and stay in center lane, following directions for Rt. 9 West. Turn right onto Rt. 9 West, also known as Highland Street. (see from Highland Street)

From Rt. 290 East:
Take Exit 17 (Rt. 9 West); turn left onto Rt. 9 West which will turn into Highland Street at the bottom of the hill. Proceed up the hill onto Highland Street. (see from Highland Street)

From Highland Street:
While on Highland Street, stay in the right lane. Stay on Highland Street for 1.5 miles. (You'll pass Elm Park and Doherty High School on the left.) At the rotary, take the third right onto June Street. At the second light, turn right onto May Street. The main entrance to the University will be three blocks ahead on the left.

For more information on public transportation, airport and carpooling, visit www.worcester.edu/directions

For GPS Purposes - Main Campus:

486 Chandler Street, Worcester, MA 01602

Discipline Information

University Switchboard: 508-929-8000
Web Site: www.worcester.edu

Discipline	Location	Sponsoring Department	Phone	Fax
Art	Learning Resource Center (LRC325)	Visual Performing Arts	508-929-8145	508-929-8166
Biology	Science & Tech Bldg (ST 310)	Biology	508-929-8569	508-929-8148
Biotechnology	Science & Tech Bldg (ST 310)	Biology	508-929-8569	508-929-8148
Business Administration	Sullivan Academic Center (S203)	Business Administration and Economics	508-929-8091	508-929-8048
Chemistry	Science & Tech Bldg (ST410)	Chemistry	508-929-8583	508-929-8171
Communication	Learning Resource Center (L332B)	Communication	508-929-8829	508-929-8170
Communication Sciences & Disorders	Science & Tech Bldg (ST115L)	Communication Sciences & Disorders	508-929-8055	508-929-8175
Computer Science	Science & Tech Bldg (ST110)	Computer Science	508-929-8832	508-929-8156
Criminal Justice	Learning Resource Center (L120)	Criminal Justice	508-929-8417	508-929-8426
Economics	Sullivan Academic Center (S203)	Business Administration and Economics	508-929-8091	508-929-8048
Education	Sullivan Academic Center (S226, S227, S218)	Education	508-929-8671	508-929-8164
English	Sullivan Academic Center (S303)	English	508-929-8154	508-929-8174
Environmental Science	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
French	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174
Geography	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
Health	Science & Tech Bldg (ST110Q)	Health Science	508-929-8832	508-929-8176
History	Sullivan Academic Center (S327)	History & Political Science	508-929-8162	508-929-8155
Mathematics	Sullivan Academic Center (S145)	Mathematics	508-929-8912	508-929-8197
Music	Learning Resource Center (LRC325)	Visual Performing Arts	508-929-8145	508-929-8166

Nursing	Science & Tech Bldg (ST222)	Nursing	508-929-8129	508-929-8168
Occupational Therapy	Science & Tech Bldg (ST210B)	Occupational Therapy	508-929-8624	508-929-8178
Philosophy	Sullivan Academic Center (S316)	Philosophy	508-929-8406	508-929-8105
Physical Education	Science & Tech Bldg (ST110Q)	Health Science	508-929-8832	508-929-8156
Physics	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
Political Science	Sullivan Academic Center (S327)	History & Political Science	508-929-8162	508-929-8155
Psychology	Sullivan Academic Center (S241)	Psychology	508-929-8159	508-929-8172
Sociology	May Street Building (TBA)	Sociology	508-929-8408	508-929-8177
Spanish	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174
Theatre	Learning Resource Center (LCR Suite 325)	Visual Performing Arts	508-929-8145	508-929-8166
Urban Studies	Sullivan Academic Center (S129)	Urban Studies	508-929-8940	508-929-8144
Visual/Perform Arts	Learning Resource Center (L132B)	Visual Performing Arts	508-929-8145	508-929-8166
World Languages	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174

INDEX

#

4Plus1 Program 273

A

Academic Achievement Awards Ceremony 35

Academic Advising 35

Academic Calendar 100

Academic Honesty 35

Academic Policies and Procedures 35

Academic Reprieve Policy 42

Academic Scholarships for Returning Students 95

Academic Support Services 42

Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science 76

Accreditation 8

Additional Admission Criteria for Selective Majors 30

Administrative Offices 428

Admission Following Withdrawal from Worcester State or Leave of Absence 18

Admission to Non-Degree Programs 19

Admissions 18

Advanced Placement (AP) Guidelines 19

Affordability/Accessibility Disclosure Statement 89

Alternatives for Individual Development (A.I.D.) 20

Alumni Association and Foundation Board 427

American Antiquarian Society Seminar 77

American Chemical Society 77

American Council on Education (ACE) College Credit Recommendation Service (CREDIT) 20

Application Process 20

Application Process 95

Arabic 412

Art 253

Art Minor 253

Art Minor 253

Art Minor 253

Art Minor 253

Art Minor 253

Athletics and Recreation 82

B

Bachelor of Science Occupational Studies Program 245

Biology 124

Biology 130

Biotechnology 137

Biotechnology 138

Bookstore 82

Business Administration 268

Business Administration Major 273

Business Administration Major, Concentration in Accounting 275

Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management 276

Business Administration Major, Concentration in Finance 276

Business Administration Major, Concentration in International Business 277

Business Administration Major, Concentration in Management 277

Business Administration Major, Concentration in Marketing 278

Business Administration Minor 279

C

Campus 9

Campus Ministry 83

Capstone Experience 48

Career Services 83

Certificate 43
Change of Catalog Information 11
Chemistry 145
Chemistry 148
Chemistry Honors Program 150
College Academic Program Sharing (CAPS) 77
College Level Examination Program (CLEP) 22
Combined BS/MS Program in Biotechnology . 140
Commonwealth Commitment 23
Communication 280
Communication Education Minor 285
Communication Major 285
Communication Major, Concentration in Advertising and Public Relations 286
Communication Major, Concentration in Media Production 287
Communication Minor 290
Communication Sciences and Disorders 155
Communication Sciences and Disorders 157
Communication Sciences and Disorders (CSD) Honors Program 159
Communication Sciences and Disorders Minor 160
Community Relations 11
Composition and Music Technology Minor 267
Composition and Music Technology Minor 267
Composition and Music Technology Minor 267
Composition and Music Technology Minor 267
Composition and Music Technology Minor 267
Computer Science 161
Computer Science Major, Concentration in Big Data Analytics 164
Computer Science Major, Concentration in Software Development 166
Concentration 43
Constitutions 49
COPACE BS/MSPC Degree Program 290
Counseling Services 83
Creative Arts 50
Criminal Justice 291
Criminal Justice Major 296
Criminal Justice Minor 298

D

Dean's List 43
Delayed (deferred) Enrollment 24
Department Challenge 77
DHE Massachusetts High School Unit Requirements (Academic Courses) 24
Dining Services 84
Directions to Campus 436
Discipline Information 437
Diversity Across the Curriculum 51
Documentation of High School Diploma or Equivalency 25

E

Early Childhood Education Major 176
Early Education and Care Program 180
Economics 299
Economics Major 302
Economics Minor 305
Education 171
Electives 43
Elementary Education Major 182
English 306
English Major 314
English Major, Concentration in Journalism ... 315
English Major, Concentration in Writing 316
English Minor 317
Enhanced Learning Opportunities 76
Environmental Science 190
Environmental Science 191

Ethnic Studies 103

Evening Undergraduate Course Offerings 25

Evening Undergraduate, Graduate, and Summer Programs 89

Exceptions 25

F

Family Educational Rights and Privacy Act 12

Fast-Track Program (RN-to-MS) 236

Federal Grants and Benefits 95

Financial Aid 95

Financial Aid Application Deadlines 96

Financial Information 89

Financial Mathematics Minor 220

First-Year Seminar 53

First-Year Student Admission 26

Four Plus One Bachelor of Science in Sociology/ Masters in Non-Profit Management 369

Four Plus One Bachelor of Science in Urban Studies / Master of Science in Non-Profit Management 391

French 412

French Minor 414

G

GED/HiSET Recipients 26

General Information 8

General Requirements for the Baccalaureate Degree 43

General Worcester State Refund Policy 90

Geography and Earth Sciences 193

Geography Honors Program 197

Geography Major: Earth Science Education Concentration 197

Geography Major: Earth System Science Concentration 199

Geography Major: Environmental Studies Concentration 200

Geography Major: General Geography Concentration 202

Geography Major: Geographic Information Systems Concentration 203

Geography Minor 205

Global Perspectives 54

Global Studies 104

Good Student Policy 44

Graduation Honors 44

Grants and Waivers for Massachusetts Residents 96

H

Health Concentration 209

Health Education Major 209

Health Education Minor 211

Health Fitness Minor 211

Health Fitness Minor 247

Health Forms and Immunization 84

Health Sciences 206

Health Services 85

Higher Education Consortium of Central Massachusetts (HECCMA) 77

History 318

History Major 326

History Major, Concentration in Foreign Service 327

History Major, Concentration in Public History 328

History Minor 329

Honors Program 44

Honors Program in Biology 132

Honors Program in Biotechnology 142

Human Behavior and Social Processes 56

I

Individual and Community Well-being 58

Information Technology 112

Intent to Graduate 44

Intergenerational Studies and Community Service Minor 392

International Applicants 26

International Baccalaureate (IB) Credit 27

International Programs 44

Internships and Professional Experiences 78

L

Laptop and Technology Requirement 46

Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery 47

Liberal Studies 113

M

Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science 133

Major in Biology, Concentration in Bioinformatics 134

Major in Biology, Concentration in Nuclear Medicine Technology 135

Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University 142

Major in Biotechnology, Concentration in Bioinformatics 143

Major in Biotechnology, Concentration in Nuclear Medicine Technology 144

Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program 151

Major in Chemistry, Concentration in Biochemistry 151

Major in Chemistry, Concentration in Bioinformatics 152

Major in Chemistry, Concentration in Green Chemistry and Environmental Chemistry 153

Major in Chemistry, Concentration in Materials Science and Inorganic Chemistry 153

Major in Chemistry, Concentration in Nuclear Medicine Technology 154

Major in Computer Science 168

Major in Computer Science, Concentration in Bioinformatics 169

MassTransfer 28

Mathematics 217

Mathematics for Elementary Education Major 220

Mathematics Major: Concentration in Secondary Education 222

Mathematics Major: Concentration in Statistics and Modeling 223

Mathematics Major: Concentration in Traditional Mathematics 225

Mathematics Minor 226

Matriculation 69

Merit Scholarships for Entering Students 97

Middle East Studies Minor 329

Middle School Education 185

Middle School Mathematics Minor 226

Minor in Biology 136

Minor in Chemistry 154

Minor in Computer Science 170

Mission 13

Multicultural Affairs 69

Music 330

Music Minor 266

Music Minor 266

Music Minor 266

Music Minor 266

Music Minor 266

N

Natural Science 228

Natural Systems and Processes (LAB) 59

Natural Systems and Processes (NSP) 59

New England Regional Student Program 78

Non-Traditional Applicants 29

Nursing 229

O

Occupational Studies 242

Off-Campus Courses 78

Office of Academic Affairs 103

Office of Student Involvement and Leadership Development 86

Officials of Worcester State University 427

P

Philosophy 346

Philosophy and Law Minor 349

Philosophy Minor 349

Physical Education 247

Physics 249

Physics Minor 251

Policy on Nondiscrimination 13

Political Science 350

Political Science Minor 354

Post-Baccalaureate Pre-medical and Health Professions Program 29

Pre-entrance Immunization Requirements 31

Pre-Law Minor 354

Pre-Law Program 78

Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program 78

Professors Emeriti 424

Program 69

Psychobiology Minor 136

Psychobiology Minor 360

Psychology 355

Psychology Major 361

Psychology Major, Concentration in Developmental Processes 363

Psychology Major, Concentration in Mental Health Services 363

Psychology Major, Interdisciplinary Concentration in Women's Studies 364

Psychology Minor 365

Public Health - Pre-Nursing Program 31

Public Health - Pre-Nursing Program 211

Public Health Major 213

Public Health Minor 216

Q

Quantitative Literacy Across the Curriculum ... 60

Quantitative Reasoning 61

R

Registration and Course Information 70

Reserve Officer Training Corps (ROTC) 79

Residence Life and Housing 87

Return of Title IV Funds 90

Room and Board 91

S

School of Education, Health, and Natural Sciences 123

School of Humanities and Social Sciences ... 252

Second Baccalaureate Degree 31

Secondary School Education 187

Services for Students 82

Sociology 366

Sociology Major 370

Sociology Minor 371

Sources of Financial Aid 97

Spanish 414

Spanish Major 418

Spanish Major, Concentration in Spanish for the Professions 419

Spanish Major, Concentration in Spanish/ Education 421

Spanish Minor for Health Professionals 422

Special Admission 31

Special Non-Matriculated Students 31

Sport Coaching Minor 248
Standards of Progress 72
Student Accessibility Services 87
Student and Parent Loans 98
Student Employment 98
Student Health Insurance 91
Student Right-to-Know Act 31
Summer Programs 81

T

The $30K Commitment 31
The Binienda Center for Civic Engagement 87
The United States and Its Role in the World 61
The Washington Center for Internships and Academic Seminars 81
Theatre 372
Theatre Minor 267
Theatre Minor 267
Theatre Minor 267
Theatre Minor 267
Theatre Minor 267
Thought, Language, and Culture 63
TITLE IX/Policies and Inquiries 14
Track One (RN Undergraduate) 236
Track Three (LPN-to-BS Program) 240
Track Two (RN-to-BS Program) 238
Transcripts 74
Transfer Student Admission 32
Transferring Credit from Other Institutions 32
Tuition and Fees 92
Tuition Payment Plan 99
Tuition Surcharge 93

U

Undergraduate Catalog 8
Undergraduate Grade Appeal Procedure 74
Undergraduate State-supported Programs 93
Undergraduate Studies 16
University Police Department 87
Urban Studies 388
Urban Studies Major 392
Urban Studies Major, Concentration in Gerontology 393
Urban Studies Major, Concentration in Intergenerational and Community Service 393
Urban Studies Major, Concentration in Public Administration and Planning 394
Urban Studies Major, Concentration in Social Work and Social Policy 394
Urban Studies Minor 395

V

Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy) 33
Veterans Service 88
Visual and Performing Arts 253
Visual and Performing Arts 253
Visual and Performing Arts 253
Visual and Performing Arts 253
Visual and Performing Arts and Education, Double Major 264
Visual and Performing Arts and Education, Double Major 264
Visual and Performing Arts and Education, Double Major 264
Visual and Performing Arts and Education, Double Major 264
Visual and Performing Arts Major 263
Visual and Performing Arts Major 263
Visual and Performing Arts Major 263
Visual and Performing Arts Major 263

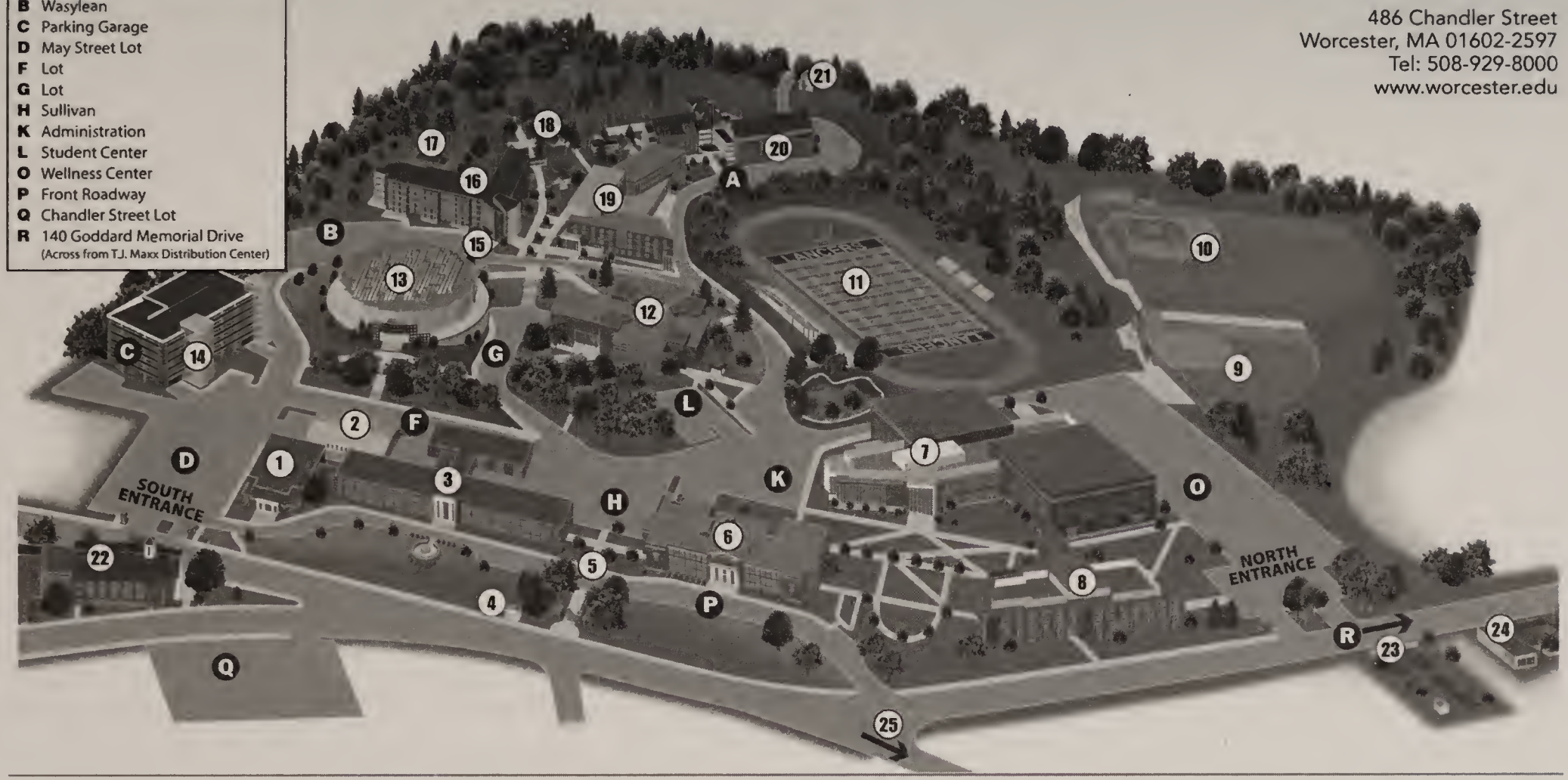
W

Withdrawal from Worcester State University/ Leave of Absence 75
Women's Studies 114

World Languages 411
Writing 66
Writing Across the Curriculum 66
Writing Minor 317

PARKING LOTS
Visitor Spots are in H Lot

- **A** Dowden
- **B** Wasylean
- **C** Parking Garage
- **D** May Street Lot
- **F** Lot
- **G** Lot
- **H** Sullivan
- **K** Administration
- **L** Student Center
- **O** Wellness Center
- **P** Front Roadway
- **Q** Chandler Street Lot
- **R** 140 Goddard Memorial Drive
  (Across from T.J. Maxx Distribution Center)



WORCESTER STATE UNIVERSITY
486 Chandler Street
Worcester, MA 01602-2597
Tel: 508-929-8000
www.worcester.edu

1 Sullivan Auditorium

2 Facilities (TA)

3 Sullivan Academic Center (S)
Eager Auditorium—1st floor
Sullivan Commons Woo Café—1st floor

4 WRTA Bus Shelter

5 Sagamore Road Studios Shuttle Stop

6 Shaughnessy Administration Bldg. (A)
Admissions, Fuller Theater—2nd floor
Academic Mall (various services)—1st floor

Bus and Shuttle Stops: 4, 5 and 15

7 Wellness Center (WELL)
George H. Albro '65, '68 Juice/Smoothie Lounge

8 Ghosh Science & Technology Center (ST)
102 Auditorium—1st floor
Mary Cosgrove Dolphin Gallery—1st floor

9 Rockwood Softball Field

10 Kevin Lyons Baseball Diamond

11 Coughlin Athletic Field

12 Student Center (SC)
Bookstore, Food Court, Blue Lounge—1st floor
Lancer's Loft, Fallon & Foster Rooms—3rd floor

13 Learning Resource Center (LRC)
Mail Center—1st floor (student package pickup)
Multicultural Affairs—1st floor
Library—2nd & 3rd floors
Starbucks Café—2nd floor
Information Technology Services—3rd floor

14 Parking Garage

15 Goddard Lot Shuttle Stop

16 Wasylean Hall—*Residence* (W)
Woo Scoops, University Police—1st floor

17 Tennis Courts

18 Chandler Village—*Residence* (CV)

19 Sheehan Hall—*Residence* (SRH)
Pulse On Dining (POD)—1st floor
Health Services—Lower Level

20 Dowden Hall—*Residence* (DH)
C-Store—Lobby

21 Campus Ministry

22 May Street Building & Auditorium (M)

23 IUI Garden for All Ages

24 Latino Education Institute (LEI)

25 Sagamore Road Studios
Worcester Center for Crafts

8/2017

WWW.WORCESTER.EDU | 486 Chandler Street, Worcester, MA 01602 | 508-929-8000